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CUPISNIQUE CULTURE:  
THE DEVELOPMENT OF IDEOLOGY  
IN THE ANCIENT ANDES

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**CUPISNIQUE CULTURE:  
THE DEVELOPMENT OF IDEOLOGY  
IN THE ANCIENT ANDES**

**Kimberly Lynn Jones, B.A., M.A.**

**Dissertation**

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Prior to my doctoral career, I had the privilege of doing fieldwork in 2003 at Chavín de Huántar with Dr. John Rick and the graduate students at Stanford University. The experience was formative in my graduate research and early fieldwork experience. Based on my work at Chavín, I came to address the site sculptural program for my Master's thesis, which I completed in 2004. Not surprisingly, the scope of my research came to include north coast and highland examples, prompting my shift of focus to Cupisnique studies for the doctoral program.

For the doctoral program at UT Austin, I pursued a research project into the north highlands or Cajamarca region, focusing specifically on the Cumbemayo Canal. Such research was inspired and greatly supported by the Instituto Nacional de Cultura in Lima, as well as the Instituto Nacional de Cultura in Cajamarca. In particular, the archaeologists Lic. Luis Francisco Esquerre Fernández and Lic. Wilder León at the INC-Cajamarca



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CUPISNIQUE CULTURE:  
THE DEVELOPMENT OF IDEOLOGY  
IN THE ANCIENT ANDES

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Cupisnique culture was first identified by Rafael Larco Hoyle in the 1930s through his encounter with an early ceramic style in the Cupisnique Quebrada on the north coast of Peru. Since that time, the ceramic styles, region and time period to which the term ‘Cupisnique’ pertains have remained loosely defined, associated with northern Peru and the Middle Formative Period (1200-900 BCE). The interpretation of Cupisnique culture has further relied on research at the highland site of Chavín de Huántar and a presumed Chavín style horizon. Cupisnique visual materials, however, provide a rich corpus from which to advance analysis of this cultural tradition. In this dissertation, I group the chapters into two parts – background information and substantive material analyses. In Part I, I begin with a concise history of Cupisnique studies, which review permits to establish the objectives and methodology of the investigation. The latter includes archaeological and visual approaches to Cupisnique culture, as well as the geographic, environmental and ecological conditions pertinent to northern Peru. In Part II, I present the results of archaeological fieldwork at the Cumbemayo Canal, near the

city of Cajamarca, Peru. Based on the field research, I examine the impact of coastal Cupisnique culture into this north highland region, and I discuss the symbolic role of monumental water management and the creation of a ritualized landscape. The intricate design of the Cumbemayo Canal segues conceptually to the exploration of a larger visual system. Based on a defined corpus of ‘Classic’ Cupisnique stirrup spout bottles, I venture a comprehensive examination of prominent themes, motifs and scenes in Cupisnique iconography. I argue that the latter comprises a reticular visual program that serves to instantiate a complex and developing ideological system. Given the common visual motifs, the tenets of this ideology consist in concepts of capture, sacrifice and fertility, interwoven through a structure of symbolic dualities. In the conclusion, I demonstrate how this proposed Cupisnique ideology conceptually fits with the development of social complexity in northern Peru through and following the Formative Period in the Andes.

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## INTRODUCTION

The Cumbemayo Canal is one of the most striking ancient monumental features still visible in the northern highlands of modern-day Peru. This unique stone-lined aqueduct stretches across a rugged landscape in the Andes. The fine channel is carved into the natural bedrock, flowing across the basin of a narrow high altitude ravine before breaking out into the surrounding grasslands. From there the canal funnels its water flow over the South American continental divide and into the Cajamarca basin. Along its course, the channel boasts an intricate design; it incorporates zigzag patterns, sweeping curves, and a slithering alternation from north to south across the flanks of the ravine. Carved petroglyphs, rock-cut tunnels, and modified caves mark key intervals along the route, from the *bocatoma* (intake) to the mouth of the ravine. The whole vista is that of an ancient monument etched into the landscape for posterity, appropriating the most vital human resource and manipulating its course for social and ritual ends.

It was into this setting that I approached the doctoral project, dedicating my research to investigating the cultural context for such monumental water architecture. In the end, the project on the north highlands blossomed into a dissertation on the development and impact of the Cupisnique tradition across the north Andes of Peru. The following text melds together two intensive studies – one archaeological and the other iconographic – in order to approach the Formative Period in the northern Andes from multiple methodological angles and geographic directions. That is, I seek to complement archaeological research on the Cumbemayo Canal and Cajamarca region to the east with research on coastal Cupisnique visual materials from the west, given the material culture available from these regions linked by a Jequetepeque River system.

Over the past thirty years, archaeological excavations around the Cajamarca basin have brought to light a number of Formative Period ceremonial structures. They have

evinced the primary rise of monumental architecture and settlement concentration during the Middle-Late Formative Period (1200-250 BCE), notably at the site of Huacaloma in the Cajamarca basin. As I discuss in Chapter 4, the material culture during this period suggests the influence of visual styles and motifs from the Jequetepeque River valley to the west. Within the north coast of Peru, the Jequetepeque River valley in particular has yielded extensive evidence of Cupisnique culture spanning from the coastal littoral up to the highland tributaries. Cupisnique ceramic bottles have been looted from along the flanks of this river valley, to emerge in the art market and private collections over the past forty years. Therefore, I came to investigate the Cupisnique tradition via these visually prolific ceramic vessels counterpoised to the coeval rise of ceremonial stone masonry architecture in the north highlands and Cajamarca region.

The breadth of this ‘bilateral’ investigation forced consideration of the temporal, geographic and material parameters used to identify and demarcate Cupisnique culture. As I discuss in Chapter 1, the term ‘Cupisnique’ has transformed over the past seventy years. Although it foremost defines early styles of north coast stirrup spout bottles, investigators have adapted the term to discuss these objects in relation to the larger sphere of Formative Period ceramic styles. In Part I, I thus review the history of such studies to establish parameters for the current investigation. I follow this with a discussion of applied methodologies and cultural interpretations, including semiotic and thematic approaches to Cupisnique iconography. For the scholars who participated in the research developments of Formative Period Andean studies, the overview may appear sweeping and broadly inclusive. Yet such big-picture ‘lumping’ is intended to provide the focus and foundation for the more detailed ‘splitting’ that I pursue in my analyses of the Cumbemayo Canal and Cupisnique ceramics.

The respective archaeological and iconographic investigations that I present in Chapters 4 and 5 of Part II may be read – in one sense – as independent projects, comprehensive in their respective scopes and each primed for future refinements. For this

scholarly work, however, I engage them rather as key ‘tent poles’ in the Formative Period landscape of cultural advancements in northern Peru. They offer tangible information by which to begin grappling with the development of social complexity in the northern Andes. In particular, the Cupisnique ceramics evince clear patterns, repeated motifs, and visual themes whose regular presentation came to command my attention. As I enumerate in the final chapter, the Cupisnique iconographic system appears to encode a complex ideological system with a vast impact and regional adoption. The overarching themes relate to concepts of fertility, capture, and sacrifice; and these concepts appear to be structured progressively within a framework of symbolic dualities.

The definition of a Cupisnique ideology notably boasts close correspondence with both preceding and succeeding cultural developments along the coast. The concepts progress from their role in Early Formative Period centers in the north-central coast to Early Intermediate Period cultures along the north coast. Indeed the former and latter cultural centers may be visually ‘linked’ via the designs on elaborate Cupisnique carved stone bowls illustrating Spider Decapitators. By the Early Intermediate Period, the north coast Moche culture literally ‘stamps’ this cultural heritage on the walls of their capital center at Huaca de la Luna (Chapter 5). Such parallels between Cupisnique and Moche iconography are, in fact, rather numerous; they bespeak a longstanding tradition and growing identity on the north coast. This suggests that Cupisnique iconography and ideology were culturally and historically potent enough to prompt their refurbishment by an upwelling and ultimately successful Moche state society. Through this thesis, I address such cultural heritage on the north coast and early social complexity in the northern Andes via the developing Cupisnique ideology of the Formative Period in Peru.

# CHAPTER 1:

## HISTORY OF CUPISNIQUE STUDIES

### **Introduction**

The term ‘Cupisnique’ was coined in 1934 by Rafael Larco Hoyle through his encounter with an early ceramic style in the Cupisnique Quebrada on the north coast of Peru (Larco 2001). Since that time, the styles, regions and time periods to which the term ‘Cupisnique’ pertains have been in a constant process of review and renewal. While scholarship generally frames ‘Cupisnique’ temporally in the middle of the Formative Period (2500-50 BCE) and spatially in the northern regions of Peru, such criteria vary considerably across the investigations. It is appropriate then to present first a concise review of Cupisnique studies. Such review will provide the foundation to understand the objectives and methodology of this dissertation, which address both archaeological and visual analyses of Cupisnique culture.

The history of Cupisnique studies presented here is broken down into two general groupings: that of stylistic analyses followed by the archaeological investigations. Since the sections proceed in chronological order, the section on archaeological research will simply add another layer of understanding to the opening sections on style. I begin with the history of Cupisnique stylistic studies because it is the most pertinent in defining the north coast tradition. The function of style is discussed more in Chapter 2. In this chapter, I simply assess the way in which ceramic and visual styles have come to define the north coast Cupisnique.

Since Larco first identified the early north coast Cupisnique style, there have been five ceramic sequences proposed, based largely on the formal properties of stirrup spout bottles (Tables 1.1, 1.4, 1.6-1.7, 1.10 below). The seriations span from the first presented by Rafael Larco Hoyle (1948), to those by John Rowe (Lanning 1960), Alan Sawyer and

Maureen Maitland (1983), and Carlos Elera (1993, 1998), to the most recent by Kayoko Toshihara (2002). Such Cupisnique stylistic sequences have altered largely in correspondence with changing perspectives of the Chavín style horizon. Given this close association to Chavín de Huántar, I follow this presentation with a comparative review of the Chavín and north highland stylistic sequences. This presentation establishes the fundamental problematic that, despite over seventy years of research, Cupisnique remains 1) unrefined as a regional or temporal culture group and 2) largely co-dependent on studies of Chavín de Huántar. These are concepts that I address further through my methodological approach (Chapter 2) and execution of a Cupisnique material culture analysis (Chapters 4-5).

In the final part of this chapter, I summarize the past eighty years of Cupisnique archaeology. The review parallels the developments in stylistic analyses, though presented by decades and contexts. Since there has been minimal archaeology of Cupisnique sites, and since exhaustive surveys of Formative Period Andean archaeology are available (Toshihara 2002), I highlight only the developments most relevant to this study. These include the north coast and highland archaeological projects, and the site of Chavín de Huántar, as well as reference to the north-central and central coasts. The field of Formative Period studies has seen a recent increase in archaeological research in these regions, clarifying ceramic chronologies, dietary changes, and monumental architecture. Since much information has yet to be published, I acknowledge that the inclusive approach to Cupisnique culture may be refined as such data becomes available.

## **1.1 Cupisnique Style**

### **1.1.1 Larco Stylistic Sequence**

Following his initial explorations at Queñeto in the Virú Valley, Larco Hoyle was invited by Tello in 1933 to witness excavations at the site of Punkurí in the Nepeña

Valley. The excavations uncovered polished black ware ceramics, as well as a polychrome feline sculpture at the entrance of a split monumental staircase (Fig. 1.1). This north-central coast site had considerable effect on Larco, as he came to view the Nepeña Valley as the center of a feline cult. Larco posited that such religious imagery and artistic design from Nepeña influenced the north coast Cupisnique and south coast Paracas cultures (1941, 2001). The following year Larco would encounter similar polished reduced-fire ceramics in the Cupisnique Quebrada (Map 2), thus providing a style name – *Cupisnique* – to the north coast tradition.

Based on such explorations, Larco opened his two volume publication on *Los Mochicas* with a discussion of the pre-Moche cultures as: Queñeto (Virú), Cupisnique (Chicama) and Punkurí (Nepeña) (2001). Larco posits the progression from stone architecture at Queñeto in the Virú Valley to conical adobe architecture at Punkurí in the Nepeña Valley. Although he argues that Nepeña and Cupisnique cultures are roughly contemporary, Larco advocates for the religious preeminence of the north-central coast and its influence on the north coast Cupisnique through a feline cult. He posits also the influence of Nepeña culture on later Chavín de Huántar, envisioning the cultural spread as moving from the coast into the highlands (Map 1).

In 1939, Larco Hoyle came to refine his definition of Cupisnique through explorations at the sites of Barbacoa and Palenque in the Chicama Valley (1941; Map 2). At these locations, Larco excavated over thirty-two burials, whose relatively consistent layout and material culture suggested a shared culture group and early temporal placement. Moche and Chimú constructions and burials stratigraphically above the cemeteries and monumental buildings at Pukuche and Punkurí confirmed their relatively early date (ibid.); the absence of metal objects also implied greater antiquity than the succeeding Moche occupations. The material goods associated with the Cupisnique burials consisted of quartz crystal, bone rings, bone spoons, and anthracite mirrors, as well as generally one to two ceramic vessels. For Larco, as for others since him, the ceramic bottles provided the most critical feature of this north coast cultural group.

Based on his extensive ceramic collections, Larco focused on establishing a stylistic chronology for the various north coast cultures. In each successive group, the sequence was founded largely on modifications to the stirrup spout bottles, as well as on the quality of ceramic composition and production. By the late 1940s, Larco presented a sequence for the Cupisnique stirrup spout bottles (1948), suggesting five major chronological groups (Table 1.1):

<b>Larco Cupisnique Ceramic Sequence</b>
Pre-Cupisnique
Cupisnique A-D
Transitional Cupisnique
Cupisnique Santa Ana
Virú-Cupisnique

Table 1.1

The final style was understood to present transitional elements into the successive Virú (Gallinazo) culture on the north coast, which (as with Salinar culture) takes place between Cupisnique and Moche societies.

Of the first four groups, the Pre-Cupisnique set denotes early experimentation with stirrup spout bottles, surmised based on a rough clay composition. The ‘Cupisnique’ group comprises largely reduced-fire ceramics, which are divided into stylistic subsets A-D. These four groups mark trends in the lip and spout thickness, as well as in the use of high-relief to dry-paste incision. For example, Cupisnique A style stirrup spout bottles comprise a round vessel body, circular stirrup, thick and pronounced spout lip. They often boast high relief images (Fig. 1.5), which iconography Larco perceives as deriving

from the Nepeña feline cult. Feline, condor and serpent images appear in high polish, resembling the quality of stone carving.

The Cupisnique B-D bottles are often executed with more open stirrup form, thinner and less polished frame, and thin and elongated spouts. These types often represent either finely incised designs or well-modeled figures – human, plant and animal forms (Fig. 1.2-1.3). The ‘Transitional Cupisnique’ style consists of graphite-painted ceramics with an oxidized base (Fig. 1.4). This bi-chrome style boasts designs and stirrups similar to Cupisnique B-D wares. Yet Larco postulates that the bi-chrome technique in this style reflects the development – or ‘transition’ – of Cupisnique ceramics into Moche style. Finally, ‘Cupisnique Santa Ana’ bottles present a pure red polish and often lack extensive figuration or decoration (Fig. 1.6). As this review suggests, Larco based his sequence on a supposition that reduce-fire wares largely precede fine oxidized ceramics, given the popularity of oxidized ceramics in the successive Virú, Salinar and Moche cultures.

While the Chicama ceramic sequence defined local north coast Cupisnique styles, the thick, high relief decoration of ‘Cupisnique A’ ceramics posed close stylistic relation to ceramics found at the north-central highland and coastal sites of Chavín de Huántar and Cerro Blanco respectively. This promulgated an ensuing debate in Formative Period studies: whether Cupisnique ceramics developed from interactive coastal traditions or reflected the expansion of highland Chavín culture into the north coast (Map 1). The proponents of these opposing viewpoints were Larco Hoyle and Tello respectively.

### 1.1.2 ‘Coastal Chavín’ Debate

Throughout his life, Larco sustained a coastal origin of Formative Period cultures in Peru (Larco 1966). From his earliest publications, he cites the coastal elements in the iconography, such as a modeled ceramic shrimp or modeled gold crab from looted coastal



contexts (2001). Larco further emphasizes the rich naturalism in Cupisnique ceramics and the stirrup spout bottle forms, as precedents to an artistic fluorescence in north coast Moche iconography (1941). In contrast to Tello (1923), Larco does not pursue modern myths or traditions to explain the Nepeña feline cult or its persistence into Chavín de Huántar. His observations remain on developments of formal properties – style and technology. This situation sustained the ‘Coastal Chavín’ debate, as successive scholars continued to utilize not only the stylistic seriations of Larco but also honored the interpretive approaches of Tello.

During the early 1900s, Julio C. Tello excavated regions of Peru from the northeastern Marañon River tributaries to the south coast and highlands. Based on such vast regional investigations, Tello developed a vision of the Formative Period as Chavín culture spanning diverse coastal and Andean settings. This vision was amplified by his successor Rebecca Carrion Cachot, who posited a Chavín Empire with regional colonies, such as the central coast at Ancón and the north highland at Kuntur Wasi (1948). The most resilient feature of this ‘empire’ was a common style of polished reduce-fire ceramics, such as those found on the north coast (Fig. 1.5) For Tello, this early cultural phenomenon promoted a sense of Peruvian nationalism, by unifying the Andes from the remote past (Mesía 2006). The situation thus prompted the ‘Coastal Chavín’ debate, which was founded by Tello and Larco through their respective research approaches and political motives (Burger 1993).

The fundamental contrast that arose between Tello and Larco – one which continues through their successors – was the *source* of earliest influence in the Formative Period cultural developments. As mentioned, Larco cites religious and technological developments along the coast from the first ceramics. In contrast, Tello presumes the cultural origins in Peru to derive from the eastern tropical forest (1923). Given the lack of cultural precedents within the site of Chavín de Huántar or its surrounding highlands, Tello promulgated the view of the tropical forest as formative for the earliest Andean culture. Tello considered coastal centers such as Cerro Sechín, Punkurí, and Cerro

Blanco, which he excavated along the north-central coast (Map 2), as postdating Chavín de Huántar and marking its cultural expansion into the coastal valleys. In his conception, the Cupisnique likewise represented the extension of Chavín influence onto the north coast – as a ‘coastal Chavín’ culture.

### 1.1.3 Chavín Style Horizon

By the early 1940s, the majority of Andean scholarship accepted the notion of this early Chavín horizon (Bennett 1943), thus comparing it with the Middle Horizon Tiwanaku expansion and the Late Horizon Inca Empire. As suggested above, the ‘horizon’ concept in Andean studies denotes periods of relatively shared ceramic styles across the Andean highlands and coast. Between these horizons took place more diverse local developments – the Early Intermediate and Late Intermediate Periods (Table 1.2):

<b>Andean Cultural Chronology</b>
Preceramic
Initial Period
Early Horizon
Early Intermediate Period
Middle Horizon
Late Intermediate Period
Late Horizon

Table 1.2

Given the historic data on the Inca Empire and the recognizable architecture of Wari (Tiwanaku) expansion, the least understood of these Andean horizons was the earliest – the Chavín horizon.

In an attempt to reduce the broad scope of Chavín culture applied by Tello, Gordon Willey came to refine the Chavín style horizon as based on the impressive stone sculptures found at Chavín de Huántar (1951). With such parameters, Willey reduces the number of regions addressed by Tello to seventeen (17) primary centers bearing Chavín stylistic similarities. The stylistic parameters encompass critical north to central coast sites such as Cupisnique, Chongoyape, Cerro Blanco, Punkurí, and Ancón and highland centers of Pacopampa and Kuntur Wasi. Willey discusses other centers identified by Tello as second- and third-level associations to the Chavín horizon, including Cerro Sechín. He further clarifies the distinction between a Chavín style horizon and Chavín tradition, which Tello had envisioned as continuing up to the Inca Wiracocha (1923).

Given the establishment of the Chavín sculptural program as central to the Chavín style horizon, in the 1960s John Rowe pursued a stylistic sequence for the monumental site sculptures (1962, 1967). By noting construction seams in the architecture, Rowe frames a seriation for the sculptures associated with such progressive building projects. The chronology consists of four phases – AB, C, D, and EF – each assigned to a complex sculpture at the site (Table 1.3):

<b>Rowe Chavín Sculptural Sequence</b>	
Phase AB	Lanzón (Fig. 1.7)
Phase C	Tello Obelisk (Fig. 1.8)
Phase D	Black and White Portal (Fig. 1.9)
Phase EF	Raimondi Stela (Fig. 1.10)

Table 1.3

Only two (AB and D) of the four phases were associated with *in situ* sculptures (the Lanzón and Black and White Portal respectively). Therefore, Rowe leaves room for further stylistic subdivisions (to divide AB and EF).

Of the four phases, the AB style pertains to the Lanzón (Fig. 1.7), a four-and-a-half (4.65) meter granite sculpture located within the earliest building at the site, Building B (Old Temple). Phase C equates to a two-and-a-half (2.5) meter granite sculpture known as the Tello Obelisk (Fig. 1.8), which was found by Tello around the rectangular plaza. Rowe correlates Phase D with the Black and White Portal sculptures – a complex of two andesite stone columns with a divided black limestone and white granite lintel (Fig. 1.9). The portal sculptures mark the central access of Building A and the Rectangular Plaza, the more expansive later constructions at the site. Finally, Phase EF associates with the Raimondi Stela (Fig. 1.10), a sculpture which was extracted from the site in 1873. Based on such decorated objects, Rowe (1977) suggests that Chavín sculptural style roughly progresses from curvilinear to rectilinear, with an increased use of subsidiary elements.

Extending from the sculptural seriation, Rowe posits certain corresponding iconographic – and ideological – developments for the Chavín monument (ibid.). He suggests that the foremost idol at Chavín de Huántar was originally the Lanzón inside Building B, which presents a supernatural figure with hands positioned in dual opposition (Fig. 1.7). Once the monumental building was expanded, the focus of public worship progressed to the Smiling God outside Building A, which supernatural image holds the dual marine shells (Fig. 1.13). Finally, the Chavín idol transformed into a supernatural figure bearing dual staves (Fig. 1.10). The Staff God of the Raimondi Stela would have been flanked – or ‘guarded’ – by the avian forms of Building A, such as the anthropomorphic avian forms sculpted around the Black and White Portal columns. Rowe substantiates this analysis by citing a gold crown from the north coast, which features a similar staff-bearing figure flanked by two avian forms (Fig 1.14). The supernatural anthropomorphic idols thus progress as symbols of harmony or duality structured within or across the images (Burger 1992).

#### 1.1.4 Early Horizon

The Chavín de Huántar sculptural sequence proposed by Rowe provided a contextual sequence by which to frame the earliest horizon outside of this highland type-site. Through the late 1950s, much work had been done in the south coast to establish a ceramic chronology for the Ocucaje style. The clear imposition of Chavín features into the region and onto the local style provided a functional marker to frame the temporal span of the Early Horizon – as the first and last appearance of Chavín style in the south coast (Menzel, Rowe and Dawson 1964). It also supported the view of Chavín expansion into the coastal regions, as an intrusive style imposed onto the local tradition.

In the late 1950s, Rowe posited a sequence of post-Chavín ceramic styles, including the north coast Cupisnique. Although this sequence was never published by Rowe, Lanning roughly reproduced the information in his dissertation (1960). According to Lanning, Rowe postulated a complex seriation of Cupisnique ceramic styles with nine phases divided in groups of three (Table 1.4):

<b>Rowe Cupisnique Ceramic Sequence</b>
Cupisnique A 1-3
Cupisnique B 4-6
Cupisnique C 7-9

Table 1.4

Rowe based his sequence on the presumption that Cupisnique largely post-dates the Chavín horizon on the north coast, which style he associates with the earliest styles Cupisnique A-1 and A-2. The north coast Cupisnique then came to specialize in “Chavín-derived representational designs, zoned-slip painting, and three-dimensional modeling”

(ibid.: 11). Despite such reproduction of the ceramic seriation, the most influential work by Rowe continued to be his sculptural chronology at Chavín de Huántar.

Extending from the sculptural studies at Chavín de Huántar, in the early 1970s, Peter Roe performed “a further seriation” of the Rowe sequence (1974). For his analysis, Roe breaks down the subsidiary elements of the primary images associated with the four sculptural phases. By isolating their respective parts – such as eye forms, mouth types and accoutrements – Roe creates a template by which to align the diverse visual programs into the Chavín sequence (Table 1.3). Under this schema, Roe argues that the north highland centers of Pacopampa and Kuntur Wasi bear relation to Phases D-EF, based on one or two key local sculptures. The remaining northern regions – Monte Calvario, Chongoyape, Alto de las Guitarras, and Chicama (Map 2) – also exhibit Phase D-EF elements. According to Roe then, all the northern sites correspond to late styles at Chavín de Huántar. Regarding the north coast ceramics, however, Roe notably avoids their seriation. He posits only that their similarities to Mosna ceramics from the Gallery of the Offerings, and to an undefined Salinar influence, suggest a late date.

In contrast to the north coast, Roe posits a relatively earlier association between the north-central and central coast sites and Chavín de Huántar. For the central coast, the material from Ancón reflects similarity with Phase C-D, given stylistic comparisons with the Tello Obelisk. The north-central coast centers of Moxeke and Pallka boast Phase AB-C styles, with Cerro Sechín ranging in his assessment from Phase C-EF. As this review suggests, Roe follows Tello in perceiving the diffusion of Chavín elements to the coast. Roe thus views the ‘trophy head cult’ identified at Chavín de Huántar and nearby Yurayaku (Fig. 1.15) as extending into the more naturalized and warlike images at Cerro Sechín (Fig. 1.17). He sees this as a logical progression into north coast Moche iconography, with its scenes of naked warriors (Donnan and McClelland 1999: Figs. 4.48, 4.100, 4.101, 4.105). Yet Roe is also forced to acknowledge a lack of identified artistic precedents to the fluorescent Chavín style, since he addresses the coastal and highland sites as resulting from or acquiring Chavín influence.

Not long after the study by Roe, there was a critical increase in 1) the archaeology of various identified 'Chavín horizon' sites and 2) radiocarbon dating of these monumental centers (see below). Such information came to evince the antiquity of many coastal centers in comparison to Chavín de Huántar (Burger 1981, 1988). It thus placed increased importance on cultural developments of the Initial Period, or the phase preceding the Early Horizon (Table 1.2), as well as on the monumental coastal centers. The study by Roe, nonetheless, offers a detailed formal analysis that maps out, and forces consideration of, the comparative stylistic elements among coastal and highland centers.

#### 1.1.5 Sawyer and Maitland Stylistic Sequence

Through his research, Peter Roe had avoided proposing a seriation of Cupisnique ceramics based on the stylistic chronology from Chavín de Huántar. Following his research, Alan Sawyer and Maureen Maitland sought to directly compare the two visual programs. In the late 1970s, through researches at the University of British Columbia, Sawyer and Maitland proposed a revised Chavín sculptural stylistic sequence, on which they founded a third stylistic sequence for Cupisnique ceramics (following Rafael Larco Hoyle in the 1940s).

The authors began by revising the sculptural chronology at Chavín de Huántar based on recent archaeological investigations. These included the Circular Plaza and atrium galleries excavated by Luis G. Lumbreras and Hernán Amat at the monumental center between 1966 and 1972 (1977, 1993, 2007). In their modified Chavín stylistic chronology, Sawyer and Maitland place the newly recovered Circular Plaza sculptures as Phase C and move the Tello Obelisk to a late EF position. They maintain the Black and White Portal as Phase D and the Raimondi Stela in Phase EF. But the investigators add the stele from the nearby site of Gotush to Phase EF. As such, the authors consolidate the alphabetic programs of Rowe into three periods: "I, Early (AB and C), II, Middle (D and part of EF) and III, Late (EF)" (1983: 51) (Table 1.5).

<b>Sawyer and Maitland Chavín Sculptural Sequence</b>	
Period I	Lanzón (Fig. 1.7) Circular Plaza Sculptures (Fig. 1.11-1.12)
Period II	Black and White Portal (Fig. 1.9)
Period III	Tello Obelisk (Fig. 1.8) Raimondi Stela (Fig. 1.10) Gotush (Fig. 1.16)

Table 1.5

Sawyer and Maitland then extend this revised Chavín sequence to the north coast ceramics. For the latest ‘Chongoyape’ style ceramic bottles (see below), Sawyer suggests that they pertain to Late Chavín. He posits that the rough texture of such Chongoyape forms once bore polychrome paint, paralleling its use in south coast Paracas ceramics along with the influx of such stirrup spout bottles. Regarding the preceding Cupisnique ceramics, the authors posit three groups. They once again apply Roman numeration (I, II, III), which groups correlate with a short period of late Chavín styles (Table 1.6).

<b>Sawyer and Maitland Cupisnique Ceramic Sequence</b>	
Group I	Chavín Period III (Table 1.5) ‘Cupisnique A’ (Fig. 1.5)
Group II	Late Chavín Period III (Table 1.5) ‘Cupisnique B-D’ (Fig. 1.2)
Group III	Post-Chavín Periods (Table 1.5) Modeled Cupisnique (Fig. 1.3)

Table 1.6



Group I pertains to the thick stirrup spout bottles with protruding lips and high relief designs, such as those demarcated by Larco as Cupisnique A. Although the authors illustrate three bottles with outstretched avian forms (ex. Fig. 1.5), they surprisingly compare this group to the Tello Obelisk (Fig. 1.8) and Raimondi Stela (Fig. 1.10) rather than to the Black and White Portal (Fig. 1.9) or Chavín avian cornice sculptures (Fig. 2.1), as Roe does for a similar set of looted wares from around Tembladera (1982, see below). Group II corresponds to Late Period III at Chavín, such as the Gotush monument (Fig. 1.16). In other words, Sawyer and Maitland associate the stylized incised heads on Cupisnique bottles to the elongated animal forms on Chavín stele. They surmise that the formal disparities suggest an increasingly selective incorporation of Chavín style features on the north coast.

Finally, Group III reflects a nearly independent north coast style by boasting Chavín imagery (although they do not directly state which images) in a “distinctive regional manner” (ibid.: 61). This group consists of the natural modeled forms (ex. Fig. 1.3), the feline cactus scenes, and the ‘trophy’ incised heads (Chapter 5). Sawyer and Maitland acknowledge the radiocarbon dates published by Burger indicating that the coastal centers largely predate Chavín de Huántar (1981); however, they maintain that the Cupisnique ceramics present a short time period corresponding to late Chavín Phase III, with Group III possibly postdating the Chavín horizon.

Following the lead of Tello (1943) and Roe (1974), Sawyer and Maitland (1983) substantiate the view of a largely post-Chavín Cupisnique culture based on the proposed continuity of trophy-head scenes into later north coast Moche iconography. Nevertheless, they cite the precedents for such trophy head scenes as *north-central* coast centers – such as Cerro Sechín (Fig. 1.18) and Moxeke – without specifying their relationship with the *north coast* Cupisnique ceramic bottles that likewise display isolated human heads (ibid.). Since no ‘Classic’ Cupisnique stirrup spout bottles have been found in the excavated north-central coast centers (Chapter 2), the cultural affiliation or influence between these regions must be explained. Larco had sought to account for such coastal cultural

affiliations through his identification of a Nepeña culture as distinct from, yet strongly influencing, the north coast Cupisnique. Since his research, however, the nature of connection between these two regions – north-central and north coasts – has been addressed largely through broad stylistic and iconographic comparisons (Chapter 6).

#### 1.1.6 Looted Cupisnique Ceramics

During the mid-1960s, a) a drought in the Jequetepeque River system and b) an increasing popularity of fine Pre-Columbian ceramics in the world art market, led to the looting of a number of Formative Period sites and cemeteries within the north coast and inner valleys. The drought exposed a number of Cupisnique cemeteries in the region, as well as caused tougher economic conditions that augmented local interest in the sale of such valuable antiquities. Cupisnique ceramics, brought out by clandestine activities, found their way to local private collections and the greater art market.

In the resultant auctions and publications, the looted Cupisnique artifacts were variously labeled “Tembladera,” “Chongoyape,” “Jequetepeque,” “Zaña,” and “Chavín.” The final label recalls the continued conception of such materials as markers of the expansive Chavín style horizon. The former terms designate either 1) the heavily looted Jequetepeque and Zaña river valleys or 2) specific sites within the northern regions (Map 2). For example, in 1976 Alan Lapiner published a number of these looted ceramics, labeling them ‘Tembladera’ based on the “Chavín cemetery” looted in 1964-1965 near the modern Jequetepeque Valley city. The modeled stirrup spout bottles generally feature trapezoidal or rectangular stirrup with a slightly flaring lip on the spout. Larco had recovered similar bottles from his excavations in the Chicama Valley, which he labeled Cupisnique B-D. Many scholars thus continue to use the term ‘Tembladera’ to describe this related Cupisnique style from the Jequetepeque Valley.

The term ‘Chongoyape’ refers to a modern town in the lower mid-Lambayeque Valley (Map 2), where two different high-status burials were looted in 1928 and 1929 (Lothrop 1941). The tombs yielded elaborate gold items such as crowns, nose ornaments, and earplugs. The second burial also featured two monochrome stirrup spout bottles of a distinct local style (Fig. 1.19), with thickened beveled lip on a convex curved spout. Given the elaborate gold work within the burials, the Chongoyape finds seem to succeed the burials recovered by Larco at Barbacoa and Palenque, which lacked metal ornaments. A number of such Chongoyape-style bottles were recovered during the looting activities in the Jequetepeque and Zaña valleys (Alva 1986). Chongoyape style bottles were further recovered from excavations at the center of Morro de Etén just down the Reque River (southern tributary of the Lambayeque River) from Chongoyape (Elera 1986; Map 2), confirming their regional prevalence and Late Formative Period placement.

Following Lapiner (1976), Jose Antonio Lavalle and Werner Lang published another compilation of private collection pieces pertaining to the ‘Chavín Formative’ (1981). The published color photographs evince the highly artistic and diverse iconographic range of north coast ceramics. Around this same time, Peter Roe examined a small set of looted ceramic bottles from the Tembladera region bearing a thick composition and similar high-relief designs (1982) (Fig. 1.5). Roe cites the bottles as a ‘Cupisnique substyle’, and he reiterates – as in his 1974 publication – the challenges of defining the north coast ceramic sequence. Roe then compares the ceramic images with the sculptural program at Chavín de Huántar. He argues that the outstretched avian forms on the bottles recall Phases C-D from the Chavín sculptural program (Table 1.3). That is, they relate to certain cornice stone images and the Black and White portal sculptures (Fig. 1.9, 2.1). Roe also posits their symbolic visual role as guardian images, thus extending his interpretations of ‘Cupisnique’ iconography from previous arguments presented by Rowe (1967) regarding Chavín de Huántar. As such, Roe reinforces the consideration of such figurative bottles as resulting from a Chavín style horizon and its expansion into the northern Jequetepeque Valley.

In contrast to the studies heavily comparing Chavín sculpture to Cupisnique ceramic bottles, in 1983 Salazar-Burger and Burger performed an iconographic study exclusively and explicitly directed at defining a Cupisnique visual theme. Through their research (1983), they identify a set of high-relief carved stone containers as representing a particular type of zoo-anthropomorphic figure. Based on the form and illustrated implements, the authors term these figures ‘Spider Decapitators’ (Fig. 1.20). The scholars draw from visual motifs represented at Garagay (Fig. 1.21) and Cerro Sechín (Fig. 1.17) to support a coastal identification of the spider motif and to suggest its early placement with regard to a Chavín horizon. Salazar-Burger and Burger, however, base their study on looted stone containers of relatively unknown provenance or archaeological context, and they do not venture discussion as to the relationship with a Cupisnique ceramic seriation. Nevertheless, the iconographic study served to enhance considerably the prestige and interest in an independent coastal Cupisnique culture.

Finally, in 1986 Walter Alva compiled an exceptional volume of the numerous Formative Period ceramics pertaining to the looted regions of the north coast and highlands. Alva arranges over four hundred of the recovered ceramics into general stylistic categories and provides the cited provenance (1986). Following the volumes by Lapiner (1976) and Lavalle and Lang (1981), the compilation by Alva significantly augments the published corpus of such looted ceramics. Alva further documents three tomb contexts from Talambo, in the lower Jequetepeque Valley (Map 2), adding to the previous research by Larco of Cupisnique funerary contexts. Nevertheless, the paucity in archaeological research to provide a stratigraphic sequence and context to such ceramic materials persisted in north coast Formative Period studies.

#### 1.1.7 The ‘Classic’ Cupisnique Sequence

The fourth Cupisnique ceramic sequence was proposed by Carlos Elera in the 1990s and was based on salvage archaeological excavations at the site of Puémapé, on

the southern side of the lower Jequetepeque Valley (1993, 1998). In contrast to the preceding two seriations, Elera correlates the Cupisnique stylistic sequence with recent ceramic seriations at north coast and highland centers and provides stratigraphic data to support the stylistic analysis. Elera further approaches the Cupisnique materials from the perspective of the north coast, returning to the conception of Larco after decades of a highly Chavín-centered approach.

Around the mid-1980s, massive looting was taking place at Puémapé, prompting Carlos Elera and his colleagues to perform salvage excavations at the site in 1989-1990 under the auspices of the new Museum of the Nation (1998). The excavations recovered occupation and burials dating from the Early Formative through Early Intermediate Periods (1800 BCE-100 CE), or from Cupisnique through Salinar cultures. These included forty-three (43) burials pertaining to the Middle Puémapé Period. A number of burials boasted decorated gourds and anthracite mirrors, as well as fine ceramic bowls and stirrup spout bottles.

Based on the ascertainable stratigraphy of the occupations and documented burials, Elera offers a revised Cupisnique ceramic stylistic sequence (1993, 1998) (Table 1.7). He notes the consistent association of trapezoidal and rectangular stirrups to his Middle Puémapé phase, with a tendency towards thicker stirrups and lips into the Late Puémapé phase. Elera posits that the thinner stirrup spout bottles – with their highly modeled forms – represent a ‘Classic’ phase in Cupisnique development.

In contrast to Larco, Elera suggests that the graphite-painted and reduce-fire bottles with similar ‘Classic’ phase stirrups and spouts are relatively coeval and may simply present regional style differences. In other words, the ‘Transitional Cupisnique’ style occurs roughly contemporary with the ‘Classic’ styles, with the caveat that the graphite bottles may pertain to inner highland centers. The general thickening of the spout and lip, reminiscent of Chavín style ceramics, corresponds to a successive Late

Cupisnique phase, perhaps a time of greater interaction between these regions. According to Elera, the Cupisnique ceramics thus progress as:

<b>Elera Cupisnique Ceramic Sequence</b>	
Early Formative (1500-1000 BCE) [Early Puémape]	Early Cupisnique [Middle Guañape]
Middle Formative (1000-200 BCE) [Middle Puémape]	‘Classic’ Cupisnique Transitional Cupisnique
Late Formative (200-50 BCE) [Late Puémape]	Chongoyape Late Cupisnique

Table 1.7

This Cupisnique ceramic sequence fundamentally shifted the north coast stylistic seriation (Tables 1.1, 1.4-1.5), by reversing the order of thick-stirrup spout bottles with that of the modeled, thin stirrup spout vessels in terms of developing coastal forms.

While it remains open for greater analysis and verification, the chronology proposed by Elera compares well with north coast and highland ceramic sequences and chronologies, as well as that established by Burger for Chavín de Huántar (1992; 1998). Classic Cupisnique style bottle fragments, for example, appear at the site of Huacaloma in the Cajamarca basin during the Late Huacaloma phase (1000-550 BCE; Terada and Onuki 1985). A complete bottle was also recovered from an intrusive burial at Cerro Blanco in the mid-Jequetepeque Valley, which site dates to the La Conga Phase (1500-1100 BCE) (Onuki 1995). ‘Classic’ style bottles were further recovered from the Cupisnique sector at Huaca Prieta in the lower Chicama Valley (Bird, Hyslop, and Skinner 1985). Both monochrome grey ware and graphite-painted Classic Cupisnique stirrup spout bottles appear in Phases 1-2 at Huaca de los Reyes in the Moche Valley (Pozorski 1983). Finally, similar bottles have been recovered from imported deposits within the Gallery of the Offerings at Chavín de Huántar, labeled Raku and Wacheksa

(Lumbreras 1993, 2007), as well as possibly Curayacu (Lanning 1960). In all of these sites, the ‘Classic Cupisnique’ bottles precede the ‘Chavín style’ ceramics.

Contrasting with Roe (1974) and Maitland and Sawyer (1983), Elera perceives a considerable influence of north coast Cupisnique on later Chavín culture (1998). In addition to the ceramic style sequence, he argues for the earlier development in Cupisnique iconography of certain artistic conventions that are highlighted by Rowe as demarcating Chavín style (*ibid.*). These include bilateral symmetry, anatomic design, and kennings (Chapter 2). As Larco before him, Elera supports such formal analyses with his interpretations of Cupisnique iconography, arguing that it fundamentally reflects a coastal ecology. In this conception, the Classic Cupisnique tradition laid the foundation for the expansive Chavín style horizon. Successive scholarship has largely supported the temporal priority of such coastal development of this ‘Classic’ Cupisnique ceramic sequence and its correspondence with advancing models of Chavín de Huántar (Burger 1998; Seki 2007; Toshihara 2002). Given its accepted use and verification through pursuant investigations, I adopt this general model through my subsequent analyses.

## **1.2 Comparative Ceramic Sequences**

### **1.2.1 Chavín de Huántar Ceramic Sequence**

Based on excavations immediately around the monumental center, Richard Burger has established a three-phase ceramic sequence at Chavín de Huántar (1992; Table 1.8). In his publications (1984; 1998), Burger compares these phases to the ceramic seriations proposed from previous site excavations, such as those by Bennett (1944), Tello (1960), Rowe (Burger 1998), and Lumbreras (1993). These include the Classic Cupisnique style ceramics recovered from the Gallery of the Offerings in the 1970s (Lumbreras 1993).

<b>Burger Chavín Ceramic Sequence</b>	
Urubarriu	1000-500 BCE
Chakinani	500-400 BCE
Janabarriu	400-200 BCE

Table 1.8

Since his excavations of the Circular Plaza atrium between 1966 and 1972, Luis Lumbreras had put forward a series of revised ceramic sequences correlating the various styles encountered in the galleries and nearby canals with the sculptural sequence from the site (1970, 1973). Such sequences had propelled views of an early Chavín horizon (ex. Sawyer and Maitland 1983), as Lumbreras originally places the polished Rocas style early in the series. The Rocas style – similar to Janabarriu style – was seen to express Chavín influence in outlying sites, including the north coast Cupisnique. In the complete report published in 1993 (reprinted in 2007), Lumbreras revises the chronology to correspond with the research by Burger and Elera, positing the local Ofrendas style followed by Rocas style (Table 1.9).

<b>Comparative Chavín Ceramic Sequences</b>	
Burger (1984, 1998)	Lumbreras (1993, 2007)
Urubarriu	Urubarriu
Chakinani	Ofrendas [Raku, Wacheksa, Mosna]
Janabarriu	Rocas-Janabarriu

Table 1.9



The other styles identified within the gallery include Raku, Wacheksa and Mosna, and they reflect intrusive forms from the north coast and highlands. The Raku style (Lumbreras 1993: Lam C-b) bears similarities to Classic Cupisnique monochrome bottles while the Wacheksa presents the graphite-painted formats of the Transitional Cupisnique style (Lumbreras 1993: Lam C-c) The Mosna style presents red-on-orange wares (Lumbreras 1993: Lam C-f), a type which likely derives from the Cajamarca region. Based on their north coast and highland origins, Burger posits that these styles arrived early in the Chavín monument (1998). He further suggests that the bi-chrome Wacheksa wares may succeed the monochrome Raku bottles, though both styles derive from the north. These bottle types at Chavín generally present modeled floral forms. Given the range of iconography found along the north coast (Chapter 5), such floral motifs were perhaps selected for specific deposition at the highland site. Whatever the intention of their deposition within the gallery, such north coast and highland ceramics at Chavín de Huántar clearly substantiate interaction between these regions. They also suggest 1) that the northern ceramic styles were recognized as distinct from local production and 2) that such ceramics had enough significance to be deposited within the central gallery at Chavín de Huántar.

Archaeometric analyses: To test the theory of ceramic importations into Chavín de Huántar, Isabelle Druc and her colleagues performed compositional analyses on the local ceramics recovered by Burger (1998, 2001). The analyses indicated trade between Chavín de Huántar, Huaricoto and Pallka, as well as between Pallka and two sites in the Nepeña Valley (Druc 1998). Such interaction was equated to Janabarriu phase ceramics. Trade with Ancón was present through a small number of imported wares during the Urubarriu phase. Yet there was no indication of exports from Chavín to Ancón or its local trade with Garagay in the central coast (Druc et al 2001). Druc and her collaborators thus conclude that the movement of ceramic materials was predominately toward Chavín de

Huántar from the coast (ibid.). In other words, Chavín de Huántar received items of trade but did not export items of local manufacture.

More recently, Luis G. Lumbreras and his colleagues published the results of preliminary archaeometric studies on ceramics from Chavín de Huántar (2003). The study seeks to confirm a local production or regional trade acquisition of ceramics. The investigators compare the results of various archaeometric methods (Mössbauer spectroscopy, X-ray diffraction, Neutron Activation Analysis) on a limited set of ceramic samples. They conclude that the different ceramic styles identified previously by Lumbreras (1993) present different material properties and firing techniques (ibid.). Although the Floral black style is found equally within the Chavín settlement and Gallery of the Offerings, the authors posit that *overall* the ceramics from the Gallery of the Offerings “are not of local production, but were brought to Chavín from the neighboring provinces, presumably as offerings.” (ibid.: 70). They arrive at no conclusion as to a specific foreign provenance; however, they suggest that the archaeometric results reflect similarities with studies from north coast ceramics – for future study and analysis. Such material studies by Druc, Lumbreras and their collaborators evince the potentiality of research into the interregional trade and cultural interactions during the Formative Period.

### 1.2.2 North Highland Ceramic Seriations

Contemporary with the stylistic revisions of Elera and Burger, Kinya Inokuchi sought to reconcile the ceramic sequence from Kuntur Wasi with the Chavín chronology (1998). Inokuchi posits that the high-ranking tombs at Kuntur Wasi pertain to the Kuntur Wasi phase (800-450 BCE), predating the Janabarriu phase (400-200 BCE) at Chavín de Huántar. He argues that such elite tombs represent an influx of north coast Cupisnique populations into the inner Jequetepeque Valley (Map 2). As such, Inokuchi supports the view regarding the relative decline of north coast Cupisnique centers by around 700 BCE (Onuki 1995). Such decline was presumed to result from a large or ‘Mega’ El Niño or

tsunami (R. Bird 1987) (Chapter 3). The highland Cupisnique influx thus is coeval with the Raku and Wacheksa wares in the Gallery of the Offerings around 800 BCE.

The concept of a coastal florescence in the Early to Middle Formative (1800-900 BCE) followed by a considerable reduction in coastal monumental centers – had been postulated by Burger (1981, 1988, 1992, 1993) and Pozorski and Pozorski (1987) and supported by Elera (1998) and Zoubek (1997) (Chapter 3). Yet the view of such abandonment is highly influenced by the data available for the Late Formative Period (900-250 BCE) coastal occupations (Burger 1993). Numerous sites, such as Limoncarro and Casa Grande, have been destroyed by modern looting and local construction, while other sites remain to be excavated or published. For example, the recent excavations by the Ventarrón Archaeological Project in the Lambayeque Valley are uncovering monumental centers at Collúd and Zarfán, sites which force consideration of an as yet considerably understudied coastal Cupisnique population. The elaborate burials at Chongoyape and Cerro Corbacho, with their ornamented gold crowns and objects, further underscore the development of social status and its requisite ideological foundation. Finally, the current set of radiocarbon dates from known site excavations may unnaturally skew understanding of occupation and construction sequences (also Bischof 2000).

### **1.3 Inclusive Approaches to Formative Period Style**

#### **1.3.1 Bischof Seriation**

Based on stylistic analyses spanning the Formative Period, Bischof addresses such problems inherent in the chronological dating of materials, and he argues for greater contemporaneity between occupations of the northern Andean sites and Chavín de Huántar. Extending from the Rowe seriation, he posits intensive interaction both during the late Middle Formative (1000-900 BCE), which he terms interchangeably ‘Cupisnique/Chavín’ or ‘Chavín A,’ and the early Late Formative (900-500 BCE), or

Chavín B-EF. Bischof thus traces formal correspondences across these regions. He does not, however, broach a Cupisnique, coastal, or Chavín-related ceramic sequence.

### 1.3.2 Toshihara Ceramic Seriation

Despite such research and investigations by Elera, Burger and others, the parameters for distinguishing a coastal Cupisnique from Chavín style ceramic and iconographic program have remained unclear. Given this situation, Kayoko Toshihara recently undertook an exhaustive review of Formative Period archaeological data (2002, 2004). Through her efforts, Toshihara proposes the fifth revised Cupisnique ceramic sequence, which in the end generally parallels that of Elera and the Jequetepeque Valley investigations (Elera 1998; Inokuchi 1998; Onuki 1995; also Burger 1998). Toshihara establishes seven phases that extend from the Preceramic through the Late Formative Period (2004; Table 1.10).

<b>Toshihara Formative Period Ceramic Sequence</b>	
Phase 1	simple ceramics
Phase 2	‘Early Guañape’
Phase 3	‘Middle Guañape’
Phase 4	‘Classic’ Cupisnique
Phase 5	‘Late Cupisnique’
Phase 6	‘Chongoyape’
Phase 7	‘Virú-Cupisnique’

Table 1.10

According to Toshihara, the ‘Classic’ Cupisnique ceramics pertain mostly to her Phase 4; these include the modeled feline cactus scenes and dual shell motifs. Toshihara argues that Phase 4 was the height of Cupisnique ceramic production, contemporary with the Circular Plaza at Chavín de Huántar. For the remaining phases, her correlations are more complex but address previously identified ‘styles’; as such, I use the established terminology for a general correlation of her research (Table 1.10).

The foundation of the sequence is archaeological data, stratigraphy and context (2002); however, Toshihara actively incorporates stylistic and iconographic interpretations, especially in her follow-up article (2004). During Phase 4, the height of Cupisnique culture in her sequence, Toshihara maintains the principal role of shamanism, and a secondary role of symbolic dualities based on the dual shell scenes and feline-cactus motifs (2004; Chapter 5). Regarding the subsequent developments, she posits that certain motifs, including scenes of paired modeled figures and dual shells, enter late in Phase 4. Toshihara assigns the stylized avian forms and Staff God figures to Phase 5, given its association with Chavín de Huántar. Presumably, due to the popularity of avian forms in Chavín iconography (Rowe 1967; see above), she applies the Classic Cupisnique bottles with modeled parrots and small birds to Phase 5 as well.

Toshihara places the north coast carved stone bowls of Spider Decapitators within Phase 5 based on an example that bears isolated heads at the joints, which she claims recalls the Tello Obelisk design (Urton 1996). Toshihara states “If the stone vessels with spiders can be placed in this phase based on this similarity (the marked joints), the spider motifs might suggest the existence of decapitation (trophy heads) although the purpose of decapitation is not clear, either for a ritual purpose or related to warfare” (2002: 442). Her analysis thus reflects the continued challenges of correlating Cupisnique stylistic and iconographic analyses under the current interpretive models.

As mentioned, Roe (1974) and Sawyer and Maitland (1983) perceived a logical transition from Cupisnique into Moche culture on the north coast based on the mutual

representations of trophy heads and decapitation. Therefore, they followed the perspective of Tello in placing Cupisnique culture as post-dating the expansion of the Chavín horizon. Around the same period (1977, 1980), Alana Cordy-Collins performed a series of iconographic analyses, in which she posits shamanic transformation as a fundamental component of Chavín – and likewise Cupisnique – visual culture (Chapter 5). Yet she also demonstrates decapitation as a critical element in Cupisnique iconography (Cordy-Collins 1992, 2001). Elera (1993, 1998) and Sharon (2000) have advanced similar interpretive frameworks of shamanistic practice for Cupisnique representations based on modern north coast *curandero* practices. Finally, Salazar-Burger and Burger (1983, 2000) have posited that two visual concepts – shamanic transformation and decapitation – coexist in Cupisnique iconography and that shamanic transformation achieves prominence in Chavín art.

If this situation is valid – which I debate in this thesis, – then the most recent ceramic sequences imply that the trophy head tradition identified in ‘Classic’ Cupisnique ceramics precedes the role of shamanic transformation as a predominant representational theme in the Chavín horizon. This sequence, however, appears to present a disjunction in north coast iconographic developments into the Moche scenes of captive warriors and decapitated victims, acknowledged by Roe (1974) and Maitland and Sawyer (1983). In this dissertation, I seek to alleviate such a perceived cultural disjunction while supporting the established ‘Classic’ Cupisnique ceramic and cultural sequence (Chapters 5 and 6).

#### **1.4 Archaeology of Cupisnique Culture**

Given the complicated nature of such stylistic sequences presented above, I follow this information with a brief overview of the corresponding archaeological research. I address Formative Period archaeology of the Cajamarca region extensively in Chapter 4 in order to frame my fieldwork project and analysis of the Cumbemayo Canal. In this opening chapter here, I rather provide a general history of site research throughout

the northern regions (coast and highlands) of Peru. As mentioned in the introduction, it is my intention here to reinforce the information presented above on the stylistic developments and to offer a pertinent foundation for my subsequent investigations.

To reiterate, in his original sequence, Rafael Larco Hoyle based his ceramic seriation on formal properties of clay composition and visual style. Yet he was persuaded by the iconography recovered from the Nepeña valley to perceive a north-central coast stylistic influence and feline cult practice into Cupisnique visual culture. The trend of combining stylistic analyses with visual interpretations continued through the successive research by Sawyer and Maitland (1983), Elera (1998), and Toshihara (2002, 2004), as well as my current research. In each case, the addressed correspondences are supported by information from Chavín de Huántar and Moche iconography (see Section 1.5). The visual analyses of Cupisnique culture thus have depended on either a broad synchronic view with extensive regional scope or a broad diachronic view with considerable temporal depth. This situation has resulted from a lack of consistent archaeological data and contexts of Cupisnique culture and monumental centers. It is worth reviewing then the archaeological research surrounding Cupisnique culture that has taken place concurrent with such visual analyses.

#### 1.4.1 Late 1800s through 1920s

Archaeology of the Peruvian north coast and the recognition of Chavín de Huántar as a critical early Andean site center really began in the late 1800s. Although Chavín de Huántar had been recorded since the conquest (Cieza de Leon 1651), it was in 1873 Antonio Raimondi that first extracted from the site and brought to Lima a stele of exceptional sculpted refinement. By 1883, Ernst Middendorff recognized the considerable antiquity of the highland center and surmised its pivotal role in an early Andean cultural horizon (Burger 1993). In 1919, Julio C. Tello performed his first excavations at Chavín de Huántar, which prompted his vision of a Chavín tradition

extending from the earliest Andean cultures through the Inca Empire (1472-1532) (1923). As mentioned, Tello's use of modern myths, his vision of a tropical forest origin, and his conception of a pan-Andean tradition would set the tone – at least implicitly if not explicitly – for many succeeding studies.

Regarding the north coast, in the late 1890s Max Uhle embarked on impressive excavations of the Huacas de Moche complex, bringing to light the pre-Chimú civilization and its rich visual tradition. Indexes of the pre-Moche layers were as yet rather limited, labeled by Kroeber in his early north coast survey simply as 'Chavín coast' or Chicama style (1925). Then, in 1928 and 1929, two tombs were looted from the site of Chongoyape, midway up the Lambayeque valley (Lothrop 1941). The first tomb held a number of cylindrical gold crowns bearing embossed images of anthropomorphic staff gods. In contrast, the second tomb bore a number of gold needles and nose ornaments, as well as two ceramic stirrup spout bottles of a northern style distinct from Moche and Chimú wares.

Finally, in the late 1920s, a complete marine univalve *Strombus* shell was recovered from the Chiclayo city airfield (Tello 1937). The shell had been modified to form a trumpet – or *pututu*, and it exhibited a complex incised design around the smoothed white exterior (Burger 1992: 216; Fig. 1.22). The design represents a naturalistic anthropomorphic figure bearing a similar *Strombus* shell trumpet toward the mouth. Around him flow stylized heads and fanged faces. The images would be recognized for correspondence with subsequent sculptural traditions from the north-central coast, namely the site of Cerro Sechín excavated by Tello in 1937 (compare Fig. 1.22 and 1.17) (Willey 1951). Indeed, Cerro Sechín would be one of many important sites excavated by Tello in the following decades.



#### 1.4.2 The 1930s and 1940s

The 1930s and 1940s were critical decades for Formative Period studies. As mentioned above, in the 1930s Tello and Larco set the tone for the ‘Coastal Chavín’ debate. By the 1940s, anthropologists including Wendell Bennett (1943), Gordon Willey, Clifford Evans and Duncan Strong (1952) actively entered the discussion. Furthermore, during these twenty years, most of the critical sites that comprise the Chavín style horizon were excavated or visited for the first time. These two decades, and the two men heading the debate, thus established the parameters for successive Formative Period Andean studies.

Through the 1930s, Tello excavated a number of sites along the coast and into the highlands. The most pertinent site investigations for the present study include his work at Punkurí and Cerro Blanco in the Nepeña Valley [1933] (Tello 1943), Casa Grande in the Chicama Valley [1934], Cerro Sechín and Moxeke in the Casma Valley [1937] (Tello 1956), Pallka up the Moxeke Valley [1937], Chavín de Huántar in the north-central highlands [1934, 1940] (Tello 1960), and Cumbemayo in the northern highlands [1937] (Tello 2004) (Map 2-3). The excavators cleared away accumulated sand or vegetal growth, and they documented building constructions and the local monumental art. Tello highlights the ceramic or representational style from each location, for their similarity to that from Chavín de Huántar (1943). While his conception of pre-Chavín highland developments changed through the course of his investigations, Tello remained convinced of a tropical forest origin to the highland site and its subsequent spread to more ‘monolithic’ centers on the coast, such as Cerro Sechín (*ibid.*).

As mentioned above, in 1933 Tello invited Larco Hoyle to visit Punkurí in Nepeña during the excavations, which incited Larco to view the Nepeña Valley as the center of a coastal Cupisnique culture. Following his encounter with the early ceramics in the Cupisnique Quebrada, Larco formalized his view of the Formative Period in direct contrast to that of Tello, arguing for an early coastal Cupisnique florescence (2001). The

research that would define such Cupisnique styles was then undertaken in 1939 in the Chicama Valley (1941).

In the cemeteries of Barbacoa and Palenque on the Hacienda Sausal, Larco excavated or recovered more than thirty-two (32) Formative Period burials. Larco denotes the features of such burials as a ‘cult of the dead’ in his early volume on Cupisnique culture (1941). In this publication, he describes nine of the tombs from Barbacoa A and D. Larco demarcates seven modes of deposition of the human remains that he labels A-G, from tightly flexed to extended bodies, with a predominance of the former (*ibid.*). The flexed burials commonly exhibit red cinnabar over the bones. The tomb chambers may be round to oval in shape or entered from a shaft. They frequently incorporate large stone blocks, either as tomb covers, lining the interior walls, or sealing an offset chamber.

Occasionally, conical adobes also comprised the walls, suggesting to Larco their early temporal position. Larco theorizes that such conical adobe construction epitomizes Cupisnique architecture, following a stone architectural phase at Queñeto (*ibid.*). He provides various schemas for the composition of such adobe structures, noting that the quadrangular blocks succeed the conical forms in the north coast. According to Larco, the visual naturalism in Cupisnique ceramics and the early adobe constructions set the stage for succeeding Moche and Chimú cultures of the north coast.

In the 1940s, a number of archaeological projects were initiated along the Peruvian coast to address the Formative Period debate, or those investigations established by Tello and Larco. As mentioned above, the Chavín style horizon was broadly accepted by Andean scholarship in the early 1940s (Bennett 1943; Burger 1993). The chronology of Andean prehistory was thus established based on three horizons and two intermediate periods, following a Preceramic phase and Initial period of ceramics (Table 1.2). As interest grew in the Chavín horizon, excavations were undertaken at sites from the central through north coasts. Gordon Willey and Corbett undertook research at Ancón in the

Supe Valley (Willey and Corbett 1954). Under an established 'Virú Valley Project,' Duncan Strong and Clifford Evans investigated at Huaca Negra in the Virú Valley and defined an early Guañape ceramic sequence (1952). Junius Bird further excavated at Huaca Prieta in the Chicama Valley (Bird, Hyslop and Skinner 1985). The latter provided considerable evidence of both Preceramic and Cupisnique occupations along the north coast. For the Preceramic levels, the excavations revealed an impressive textile production and developed fishing industry, while for the Cupisnique layers it offered a vision of domestic occupations.

Meanwhile, through the 1940s, Tello and Larco published more information regarding their research (Larco 1941, 1945, 1948; Tello 1943), and each visited highland sites that would become foundational centers of the Chavín horizon debate. In 1946, Tello visited Kuntur Wasi in the upper Jequetepeque Valley, which investigations Carrion-Cachot later published (1948). These investigations registered elaborate stone sculptures (Fig. 1.23-1.24), which Roe (1974) and others would reference in relation to the Chavín style horizon. Larco went to see the site of Pacopampa, bringing to light two impressive sculptures from this north highland center (Fig. 1.25). Finally, by the late 1940s such early Andean art hit the art market, prompting popular interest in Formative Period Peru (Salazar-Burger and Burger 1996).

#### 1.4.3 The 1950s and 1960s

The 1950s and 1960s may be categorized as the period critical to defining the Chavín horizon. During these decades, most of the initial excavations from the coast and highlands were published (Strong and Evans 1952, Tello 1960, Willey and Corbett 1954). In 1958, the Japanese Expedition to the Andes also began research in the upper north coast and central highlands (Izumi and Terada 1966). The excavations at Kotosh and Shillacoto in Ancash revealed early Preceramic occupations that preceded early ceramic levels and a succeeding Chavín settlement (Izumi and Sono 1963; Izumi and Terada

1972). Similarly, research in the Peruvian south coast evinced the clear imposition of Chavín style elements into the region. As described above, Willey had established the Chavín style as those features resembling the sculptures at Chavín de Huántar (1951). Rowe had refined this Chavín horizon through a stylistic seriation of the Chavín sculptural program (1962, 1967). Based on these parameters, Menzel, Rowe and Dawson (1964) came to define the *Early Horizon* – as the first and last appearance of Chavín style in the south coast. This definition gave the Early Horizon a defined temporal range and historic weight, in contrast to the loosely woven, broad web of the Chavín style horizon.

1968 Dumbarton Oaks Conference on Chavín: In 1968, such concerted researches regarding the ‘Chavín horizon’ led to the organization of a conference at Dumbarton Oaks in Washington D.C (Benson 1971). The conference papers focused on defining the horizon from all angles: for example, 1) the origin of Chavín culture (Lathrap 1971), 2) the nature of the Chavín horizon (Patterson 1971), and 3) the successive extensions of Chavín culture into later styles such as the north coast Moche (Rowe 1971). Through such approaches, the Chavín horizon was compared with the Olmec culture of Mesoamerica and the spread of Christianity in medieval Europe. In other words, the scholarship proceeded from the perspective that the Chavín horizon was the result of a cult, or religious system, rather than a direct military or social expansion. During and following the conference, Lathrap promoted the view that this Chavín cult had its origins in the tropical forest regions of Peru, and that it expanded to the coast by way of the Andean highlands (Lathrap 1971, 1973, 1977).

During the mid- to late 1960s, however, numerous surveys took place throughout the north and central valleys (Donnan 1973 [Santa Valley]; Kosok 1965 [North coast]; Proulx 1968 [Nepeña Valley]; Scheele 1970 [Central Coast]), documenting the numerous Formative Period coastal settlements. These surveys took place around the same time that there was a dramatic increase in looting of numerous Formative Period cemeteries,

mentioned above (Alva 1986; Lapiner 1976). Such emerging data – archaeological and material – came to enhance considerably the goals and interests of the following decades of Formative Period investigations.

#### 1.4.4 The 1970s and 1980s

During the 1970s and 1980s, there appeared the first critical archaeological projects and iconographic studies toward defining the north coast Cupisnique. Such investigations benefitted from the contemporary archaeological research undertaken at Chavín de Huántar. From 1968 to 1972, Luis Lumbreras excavated at the highland center, uncovering the Circular Plaza atrium with its elaborate sculpted ashlar and the Gallery of the Offerings with its plethora of material and organic deposits (Lumbreras 1977, 1993, 2007). The research provided a radiocarbon date for the Circular Plaza atrium at c. 750 BCE, as well as a series of revised ceramic sequences discussed above. It also prompted revised Chavín – and likewise Cupisnique – iconographic studies based on the recovered visual materials (Cordy-Collins 1977, 1980).

Following the work by Tello, Bennett, and Lumbreras in the monumental center proper, Burger performed his doctoral research on settlements around Chavín de Huántar, providing the first substantial local settlement ceramic sequence and radiocarbon dates. As mentioned above, he placed Chavín ceramics late in the Formative Period, with three phases (1992): Urubarru (1000-500 BCE), Chakinani (500-400 BCE), and Janabarriu (400-200 BCE). According to his sequence, the local Chavín occupation largely aligns with the Early Horizon (Late Formative [900-200 BCE]) rather than the preceding Initial Period (Middle Formative [1200-900 BCE]). Information for the latter was increasingly emerging from excavations on the coast and north highlands.

During these twenty years, archaeological investigations took place at critical centers along the Andean coast. These included: Huaca Lucia in the La Leche Valley

(Shimada, Elera and Shimada 1982); Poro Poro and Purulén in the Zaña Valley (Alva 1988a, b); Pacopampa and Pandanche in the northern highlands (Fung 1974; Kaulicke 1975; Morales 1980; Rosas and Shady 1970, 1974); Morro de Etén in the Reque Valley (Elera 1986); Huacaloma and Layzón in the Cajamarca basin (Terada and Onuki 1982, 1985); Montegrande in the mid-Jequetepeque Valley (Tellenbach 1986); Caballo Muerto in the Moche Valley (T. Pozorski 1976b, 1983; Watanabe 1972); La Galgada in the upper Tablachaca Valley (Grieder et al. 1988); Las Haldas and Cerro Sechín in the Casma Valley (Maldonado 1992; Samaniego, Vergara, and Bischof 1985); and Garagay in the Rimac Valley (Ravines 1984) (Map 2). The investigations augmented considerably the archaeological data spanning the Formative Period (2200-50 BCE). For example, the research at La Galgada provided textiles of comparative quality and style to those recovered by Junius Bird at Huaca Prieta (Bird, Hyslop and Skinner 1985). It further evinced the transition from Preceramic (Initial-Early Formative [2200-1200 BCE]) monumental occupations, which shared in the highland Kotosh Religious Tradition, to Initial Period (Middle Formative [1200-900 BCE]) constructions, which incorporated coastal U-shaped architecture. The site of Cerro Sechín, also in the north-central coast, provided data regarding a continuous Early to Middle Formative Period use of the monumental center (Maldonado 1992). In contrast, the north highland centers of Pacopampa and Huacaloma presented occupations from the Middle to Late Formative Periods (Rosas and Shady 1970; Terada and Onuki 1985), evincing the use of terrace architecture and stone-lined canals.

The cited investigations further brought to light important information relevant to Cupisnique studies. For example, the research at Caballo Muerto provided an architectural type-site and possible ritual center for Cupisnique culture at the Huaca de los Reyes complex (Conklin 1985; Pozorski 1983). The monumental center boasted U-shaped architecture, open rectangular plazas, colonnaded facades, and high relief polychrome mural decoration. Similar architectural programs appeared in Huaca Lucia and Purulén (Alva 1988a; Burger 1992; Shimada, Elera and Shimada 1982), both of

which comprised colonnaded entranceways on a terraced monumental structure. Furthermore, Classic Cupisnique stirrup spout fragments were recovered from Caballo Muerto (Pozorski 1983), as well as from Huacaloma in the northern highlands (Terada and Onuki 1985), suggesting their relative temporal placement and spatial distribution. In contrast, the architectural programs and material goods from Montegrande evinced cultural traditions seemingly preceding Cupisnique influence in the Jequetepeque region (Tellenbach 1986). The investigations at Morro de Etén rather provided *terminus ante quem* based on late ceramic styles related to examples from the high-status Chongoyape tombs (Elera 1986).

1982 Dumbarton Oaks Conference: Such emerging data of the Formative Period prompted the topic of the 1982 Dumbarton Oaks Conference on *Early Ceremonial Architecture in the Andes* (Donnan 1985). The 1982 conference sought to revise the vision of the Formative Period based on the information of the Initial Period (Middle Formative [1200-900 BCE]). The sites and radiocarbon dates had come to evince the early temporal position of the coastal monumental centers in relation to Chavín de Huántar (Burger 1981), reversing the temporal order proposed in previous stylistic studies (Roe 1974, Sawyer and Maitland 1983). As Burger notes in the concluding chapter of the conference publication, the reversal of inter-site relationships spurred debate regarding the impetus for Andean developments, such as the role of maritime adaptations or tropical forest importations.

The debate of Andean development centered largely on questions of subsistence. Therefore, the various coastal and highland excavations recovered data for the more substantial dietary studies (Chapter 3). Such research suggested the proportional increase in llama domestication over deer hunting through the Middle Formative (Miller 1984; M. Shimada 1985). As llama consumption grew, it may have become differentiated by status and the quality of meat (Miller and Burger 1995, 1998). The field data also suggested

subtle changes in plant domestication, such as the introduction of the peanut and an increase in maize consumption during the Middle and Late Formative Periods respectively (R. Bird 1987; Burger and van der Merwe 1990; S. Pozorski 1979; Pozorski and Pozorski 1979). Such dietary studies have been revisited in the last ten years based on recent excavations; however, they remain limited in conclusive results (Seki and Yoneda 2005; Tykot, van der Merwe, and Burger 2006). At a minimum, the data suggests that maize consumption – unlike in Mesoamerica – did not serve a critical role in Andean cultural developments during the Formative Period (Chapter 3).

Although the archaeological excavations provided increased data such as radiocarbon dates and dietary studies, they continued to produce minimal contextualized visual materials. Nevertheless, critical studies emerged during this period based on the extensive amount of looted artifacts. For example, Alana Cordy-Collins undertook analysis of numerous textiles that had been recently looted from the site of Karwa on the south coast (1976). The textiles reflect coastal weaving techniques yet bear imagery and styles closely related to that of Chavín de Huántar. The most common motif was a frontal anthropomorphic figure bearing staves in either hand, similar to the Raimondi Stela of Phase EF (Fig. 1.10). The textiles thus implied a late coastal expansion of Chavín imagery in support of the identified style horizon. To date, they remain the only examples of Chavín style imagery in textile production, offering an invaluable resource regarding this no-doubt viable medium of trade and exchange – be it economic, political, material, iconographic, or ideological.

#### 1.4.5 The 1990s to Present

Based on such research advances regarding Middle Formative coastal and highland occupations, scholarship has come to address Cupisnique culture largely as a separate entity to that of a Chavín horizon. Indeed, the concept of a Chavín horizon was even put into question by Thomas and Sheila Pozorski (1987), to be subsequently



defended by Richard Burger (1993) and continuously reassessed in relation to an emerging Cupisnique identity (Elera 1998). The significant iconographic and stylistic researches during the 1990s thus set the stage for the archaeology currently underway or recently undertaken to define Cupisnique.

At the end of the 1980s and early 1990s, a few critical excavations inspired renewed insight into north coast and highland Formative occupations. In 1989-1990, Carlos Elera performed salvage excavations at the site of Puémape, on the southern side of the Jequetepeque Valley. The burials recovered at the site provided information for a series of studies (1993, 1997, 1998), which revised Cupisnique ceramic chronology and set forth some observable contrasts between Cupisnique and Salinar practices. For example, there appeared a marked shift from flexed Cupisnique burials to extended Salinar burials, as from the former inclusion of red cinnabar over the deceased to its marked disuse in the latter (1998). As mentioned above, the research at Puémape culminated in a doctoral dissertation (*ibid.*), in which Elera conceives a fully developed Classic Cupisnique Culture, a social complex preceding that of Chavín de Huántar and that appears to set the foundation for subsequent north coast societies.

The research and ideas propelled by Elera took place contemporary with important discoveries at the site of Kuntur Wasi in the late 1980s and early 1990s (Onuki 1995). Excavations at this mid-valley highland site led to the discovery of eight burials of high-status individuals, as suggested by their considerable wealth of associated material goods (Onuki 1997). The recovered gold crowns and pectorals reflect similar motifs and visual styles to those found on north coast ceramics and in the looted tombs from Chongoyape and Cerro Corbacho. The investigators thus surmised that the buried individuals at Kuntur Wasi were coastal inhabitants that had moved into the highland site (*ibid.*). This presumption of a coastal population influx was supported 1) by the exostoses found in the ears of certain individuals (a condition caused by the repetitive abrasiveness of cold water upon the inner ear) and 2) by the theories regarding a late Middle Formative coastal collapse (Chapter 3).

Based on the high-status burials, the Kuntur Wasi phase of the highland monumental center became understood as derived from a coastal Cupisnique influence rather than as representative of a ‘colony’ of the Chavín horizon (Carrion-Cachot 1948; Seki et al 2006). The richly-adorned burials reflected a structure of social status reflective of similar materials deriving from looted contexts along the north coast. The location and intentional arrangement of four such burials within the monumental central platform further suggested an established ideology or symbolic structure surrounding these high-status individuals. These features imply that the coastal Cupisnique had developed a degree of social status and ideology, which may have extended up into the northern highlands (Chapter 6).

Status of the Chavín and Cupisnique Debate: Nevertheless, the close correspondences between Kuntur Wasi and Chavín de Huántar – in architecture, sculpture, and ceramics – that had early assigned Kuntur Wasi to the Chavín horizon were augmented, not contradicted, by the material culture of the tombs. The site of Kuntur Wasi not only boasts a circular plaza similar that at Chavín de Huántar, but also a set of elaborate stone sculptures with fanged faces composed in contour rivalry (Fig. 1.23-1.24). The burial contexts add to these comparative features by including the symbolic placement of *Strombus* trumpets and *Spondylus* shell, as well as the agnathic faced feline (Chapter 5). The excavations at Kuntur Wasi thus support the view of a prominent and interactive north coast and highland Middle to Late Formative Period cultural sphere (Cupisnique), while still not explaining the close correspondences with Chavín de Huántar.

The investigation of such correspondences – which continue to fall under the rubric of a Chavín horizon – has remained the subject of many Formative Period visual analyses. Since their 1983 publication on the Cupisnique spider decapitators, Salazar-Burger and Burger have maintained a distinction between Cupisnique and Chavín visual culture (2000). Their distinction is based presumably on a shifting emphasis in a closely

related ideological framework – decapitation versus shamanic transformation (1996). The division in practice, however, appears to be more based on differences in visual display rather than their underlying (or overarching) symbolic concepts.

In a similar fashion, the investigations by Bischof of Chavín A and Chavín B-EF styles have sought greater understanding of the Middle Formative to Late Formative transition (1994, 2000). Bischof avidly pursues the current Formative Period archaeological data and radiocarbon dates for the comparative coast and highland materials. As such, he seeks to confine his research to provenanced visual materials, emphasizing the *north-central* coast monumental art. Due to such limitations, however, Bischof remains on the level of stylistic comparison and sequence rather than venturing interpretive analyses. The *motivations behind* such developments in Cupisnique or Chavín style and iconography thus remain largely unanswered.

As I discuss in Chapter 2, such ideological and cultural motivations propelling the iconography may be pursued by establishing a comparative corpus of materials and their available contexts. The vast set of looted Cupisnique ceramics provides a substantial visual corpus boasting crucial information. In Andean studies, the manner in which such a corpus may be examined has its greatest example in Moche studies.

Thousands of Moche ceramics have been looted from their original contexts over the last century and have found their ways into the art market, public and private collections. Moche scholars came to study these objects, establishing stylistic sequences and positing visual analyses, originally without the aid of extensive archaeological contexts. Over the past thirty years, advances in Moche archaeology have come to greatly enhance these preceding visual studies. This closely comparative example in Andean studies thus offers great potential for methodological approaches to Cupisnique visual culture (Chapter 2). Given my use of these methodological approaches, I offer here a brief summary of recent Moche archaeological and visual research.

## 1.5 Revolution in Moche Studies

Moche archaeology and visual studies have a long history beginning in the late 1800s. Since that time, numerous sites have been excavated along the north coast, concurrent with iconographic analyses of the extensive corpus of Moche ceramics (Bourget 1994, 2006; Donnan 1975, 1978, 1997, 2004; Donnan and McClelland 1979, 1999; Hocquenghem 1987; Larco Hoyle 2001; Lavallée 1970). By the late 1980s, however, an archaeological discovery at the site of Sipán (Lambayeque Valley) came to propel the studies of Moche culture into new depths and disciplinary frameworks. Since that discovery, a transformation has taken place in Moche scholarship, one which has implications for the future of Andean studies, including *Cupisnique studies*.

### 1.5.1 Moche Art and Archaeology: Correspondences

In 1987, high-status Moche tombs were recovered at the site of Sipán in the Lambayeque Valley. The individuals in the tombs were buried with material regalia – such as feather fans, metal headdresses, decorated tunics, and backflaps. Such regalia paralleled closely the representations of accoutrements worn by certain represented individuals that the archaeological remains at Sipán thus could be compared with the descriptive scenes in Moche iconography. In other words, Walter Alva and Christopher Donnan suggest that the individuals buried in Tombs 1 and 2 at Sipán were the living counterparts of two figures – A and B – illustrated in a particular set of Moche scenes (1993). Such direct correspondences identified between the archaeology and iconography prompted a revolution in Moche studies that continues to this day (Bourget 2001, 2008, n.d; Donnan 2008, Cordy-Collins and Merbs 2008, Uceda 2008).

Although the interpretive degree of one-to-one correspondence between the visual and the material may be debated (Verano 2001), the approach has become widely accepted in Moche visual and archaeological research (see Bourget and Jones, ed. 2008).

The results have been the physical identification of nearly every individual represented in the Moche Sacrifice Ceremony and many of the illustrated actions, such as human sacrifice (Bourget 2001). Scholarship on Moche iconography has actively utilized comparative historical (Donnan 1975) and Structuralist (Hocquenghem 1987) approaches in order to explain the complex Moche scenes. The archaeological data now may be understood to render direct comparison between contemporary Moche practice and illustration, ritual and representation, performance and ideology. As I discuss in Chapter 2, this sense of visual correspondence between the art and archaeology has striking implications for methodological approaches to research in ancient Andean iconography. The understanding it has provided for Moche studies further has relevance to studies of the preceding cultural foundations, namely Cupisnique culture.

### 1.5.2 Moche and Cupisnique: Comparative Studies

The north coast Cupisnique and Chavín visual traditions have been regularly compared with Moche iconography for the past forty years. In the 1968 conference, Rowe had noted the ‘archaisms’ of Chavín style that are found in certain Moche ceramics (1971), those same elements which had prompted Tello and Willey to cite Moche as part of the Chavín horizon (Willey 1951). Since the article by Rowe, comparisons between Cupisnique (Chavín) and Moche iconography were addressed minimally with regard to chronological placement (Roe 1974; Sawyer and Maitland 1983), until the 1990s. More recently, however, Cordy-Collins (1992, 1996), Elera (1993, 1998), and Sharon (2000) have pursued analyses of Cupisnique iconography as the foundation of longstanding cultural tradition on the north coast of Peru (Chapter 5). The authors venture close correspondences with figures or elements in Moche representations. Although the visual comparisons differ for each author, the scholars are motivated by a similar intention – to establish cultural continuity to provide interpretation for earlier Cupisnique materials.

Despite the temporal disjunctions brought into the analyses through comparisons with modern *curandero* practice, the comparative Moche and Cupisnique investigations evince close correlations between selected visual scenes. Following the investigative postulate set by Rowe forty years ago (1971), such research – including the study I present in this thesis – is now bolstered by an enhanced understanding of Moche iconography and a larger Cupisnique material corpus. The nature of Cupisnique social development thus holds extreme investigative potential – through a) new investigative approaches to north coast iconography, b) increased scholarship on comparative visual programs, and c) enriched archaeology of Cupisnique culture, clarifying its spatial and temporal position in Andean prehistory.

## **1.6 Final Considerations**

As the final paragraphs suggest, Cupisnique studies – in my view – is on the threshold of a transformation in information and interpretation. It may even be following in the conceptual footsteps of Moche visual studies of the past twenty years: for example, from comparisons with modern practice or later Andean structures to 1) more direct comparison with the contemporary archaeological data and 2) the identification of certain social actors and ideology. The nature of these changes in methodological approach to Cupisnique studies and their application to the current study is the topic of Chapter 2. Therefore, it is useful here to summarize briefly the critical elements that emerged through the history of Cupisnique studies, which I have described throughout this chapter and which have laid the foundation for this potential transformation.

The most salient feature defining Cupisnique culture since the outset has been the early styles of ceramic stirrup spout bottles. Following the Cupisnique, such bottle forms persisted along the north coast of Peru through the conquest, supporting Larco in his view of the coastal origin and conceptual foundation of this symbolic ceramic form. The Cupisnique stirrup spout bottles and their iconography have provided a number of close

correspondences with Chavín and Moche visual programs. These have led investigators to frame Cupisnique stylistic sequences to correspond best with advancing notions regarding the Chavín horizon and its temporal relation to coastal developments. Early investigations placed Cupisnique between the Chavín horizon and Moche society.

More recent studies, however, have substantiated the precedence of ‘Classic’ Cupisnique forms in relation to both Chavín and Moche culture, a temporal placement of extreme significance for the future of Formative Period studies. The Middle Formative Period boasted extensive monumental constructions along the coast, which sites in the north correspond in part to Cupisnique cultural developments. Therefore, the Cupisnique coastal occupations not only initiated but also sustained large-scale ceremonial or administrative centers. The ‘Classic’ Cupisnique ceramic bottles that define such cultural affiliations have further demarcated a regional spread from along the north coast into the north highlands (Chapter 2). As mentioned above, the importation of such bottles into Chavín de Huántar supports not only their earlier temporal development but also their significance as a distinct coastal style.

The ‘Classic’ Cupisnique forms may now be approached as independent developments along the north coast and highlands. These Middle Formative coastal centers thus came to interact with or potentially influence those elements once defined as the ‘Chavín style horizon.’ Although the temporal schema has largely been accepted, the social implications have not yet been fully explored. In other words, a ‘Classic Cupisnique’ style precedes a ‘Classic Chavín’ phase and Moche society, but it presents considerable material and iconographic correspondences with both cultures. This would suggest that the both successful cultural programs had as their impetus Cupisnique culture and ideology.

The definition of Cupisnique culture and ideology is the overarching topic of this dissertation, which I divide into two parts. Part I consists of this opening chapter on the history of Cupisnique studies, as well as chapters on methodology (Chapter 2) and

pertinent cross-disciplinary research (Chapter 3). In Chapter 2, I establish the terminology and methodology for my approach to the archaeological and visual material. In Chapter 3, I focus on relevant research in related disciplines, including geography, ecology, environment, and subsistence practices. These chapters thus provide the conceptual foundations by which to understand the analyses I venture in Part II (Chapters 4, 5, and 6) of the dissertation.

Part II of the thesis comprises the results of my archaeological fieldwork (Chapter 4) and visual analyses (Chapter 5). In Chapter 4, I present the result of field research I conducted in the Summer 2006 and Fall 2007 on the Cumbemayo Canal to the southeast of the modern north highland city of Cajamarca, Peru. In October 2007, I was granted a permit from the National Institute of Culture (INC) to create a digital map of the archaeological site using Total Station and GPS technology. Encompassing this field research, I sought to consolidate information regarding the preceding research projects and initiatives enacted at this site since its rediscovery in 1937. The monumental scale and intricate design of the Cumbemayo Canal have drawn continued interest from scholarship, as well as recently local and foreign tourists. In Chapter 4, I begin by presenting a comprehensive review of the site research history followed by the results of my archaeological fieldwork project. For the remaining chapter, I broaden my scope to posit an interpretive analysis of the archaeological site, its cultural context and intentional design. I address local cultural comparisons in site layout, petroglyph and cave features, construction technique, and proximity with monumental centers. Although these elements sufficiently contextualize the canal within the Late Huacaloma Period (1000-500 BCE) cultural setting of the Cajamarca basin, they provide minimal interpretive insight as to the canal design and construction. It was looking towards these aspects that I came to expand the scope of my research for the dissertation. Such research interests ultimately generated the more extensive visual analysis that I present in Chapter 5.

Chapter 5 is undoubtedly the most substantial chapter in the current dissertation. The analysis is largely formal and iconographic, identifying figures and forms illustrated



or modeled in ceramic stirrup spout bottles and stone bowls from the north coast of Peru. The majority of ceramic vessels depict anthropomorphic (human), zoomorphic (animal), or phytomorphic (plant) forms. I thus divide the chapter into these respective categories, and I identify and examine the major themes and motifs in ‘Classic’ Cupisnique iconography. The more complex images in Cupisnique iconography, however, often combine specific forms together in a scene or visual arrangement. As I discuss in the chapter, these scenes suggest and reinforce the idea that such iconographic elements are conceptually interrelated and symbolic of a larger visual system. Throughout Chapter 5, I address or allude to possible interpretive meanings behind the individual representations or complex scenes. Nevertheless, if the Cupisnique iconographic corpus truly works together as a complex visual system – as I propose it does, – then interpretation follows only after a full review of the corpus. In Chapter 5, I thus outline and carry through certain consistent conceptual themes. Through the chapter, I compare these Cupisnique themes with the sculptural program at Chavín de Huántar, and suggest correspondences with scenes in the successive Moche iconography to substantiate their conceptual fit. It is for this reason that I have introduced above the history of these two comparative visual programs, as well as examine their methodological import in Chapter 2.

Finally, the extensive research presented throughout Parts I and II of the thesis provide the foundation for the concepts that I pursue in Chapter 6. In this chapter, I summarize the variant arguments established throughout the text to propose certain salient components of a Cupisnique ideology and its interregional influence. I conclude Chapter 6 – and the dissertation as a whole – by testing this ideology against preceding and succeeding cultural programs to assess the degree of interpretive fit, and to offer avenues for future investigations.

## CHAPTER 2:

### APPROACHES TO ANCIENT ANDEAN VISUAL CULTURE

#### **Introduction**

As suggested throughout Chapter 1, studies of the ancient Andes rely on the archaeological and material record to define and distinguish between prehistoric cultures. In the case of the abundant looted materials, such scholarship has drawn substantially on visual studies, from taxonomic classifications to more interpretive investigations. This situation owes in large part to the complete absence of written documents in Andean prehistory until the Spanish conquest. It persists due to the temporal disjunction presented by colonial records or ethnographic studies in providing comparative data for ancient Andean traditions. In other words, archaeological context and material record present the most reliable testimony to the prehistoric practices and cultural systems in South America. Nevertheless, the data presents an incomplete record of ancient lifeways, and it places greater significance on interpretative framework created by the modern investigators. Therefore, it is incumbent on the researcher to approach the material with an understanding of the limitations, but also with an interest to challenge the data under relevant methodological frameworks.

Before an investigation of Cupisnique culture is undertaken, I seek to establish three elements: 1) spatial and temporal parameters, 2) archaeological contexts, and 3) methodological approaches. As discussed in Chapter 1, these components have remained rather loosely defined for Cupisnique studies, partly restricted by available data. The fundamental objective of this chapter then is to delineate these critical elements for the succeeding investigation, thus establishing the requisite terminology. Since style came to define Andean cultural horizons, I begin with a review of its application within Formative Period studies. I then use the ‘Classic’ Cupisnique style to frame the investigation, by

establishing its chronological and spatial parameters. Since such parameters rely on the proper dating and documentation of the archaeological record, I address briefly certain key contexts and methods of interpretation.

With a clear emphasis placed on visual culture – establishing a corpus, its objects and their comparative iconography – the current study fits largely within an art historical discipline. Nevertheless, the interpretation of such a-historic materials benefits greatly from a multi-disciplinary approach, including anthropological theory. Therefore, I conclude this chapter by introducing theoretical angles that I apply to the current investigation of Cupisnique iconography and culture. Crucial to this review is the role of semiotics in visual studies – its utility and limitations. Furthermore, I address the use of comparative theoretical models with regard to the challenges posed by disjunctive cultural analogies. By establishing bases for a semiotic analysis and thematic approach to the iconography, this will permit me to explore the nature of complex motifs, symbolic dualities and structured ecology in Cupisnique visual culture (Chapter 5).

## **2.1 Horizons and Styles**

By the early 1940s, the Chavín horizon had come into place as the foundation of the Early Horizon, preceding the Middle and Late Horizons of the Wari and Inca cultures. As Willey notes (1951), however, some horizon styles had by then already been done away with for their inutility. This included the Red-and-White horizon that was originally seen to take place prior to the Wari phase. Willey argues that the Red-and-White horizon was simply a ‘technological’ practice shared across the Andes by quite distinct regional groups. In other words, for him it comprised one of three components of his definition of an archaeological style: 1) technology (materials and techniques) 2) representation and 3) configuration (*ibid.*). Although technology and representation may be shared across regions and time, their configuration is unique to a given style. In other words, the manner in which formal properties and iconography work together creates a recognizable

style, for techniques, materials, motifs, visual patterns, etc. can be independently adopted by cultural groups. While I support this definition in concept, as Willey demonstrates in his study, the application of such parameters is often difficult in practice given a limited visual sample and distinction of iconographic motifs.

Adding to the challenge of the above definition, the concept of a *horizon style* presumes a degree of shared, traded or blended properties, where a dominant style spreads into various localized stylistic regions. In the Middle and Late Horizons, this phenomenon took place through the importation of Wari and Inca ceramic styles and techniques into the north coast. Such material admixtures reflect the socio-political and ideological expansion of the former groups into the latter region. For the so-called Early Horizon, the nature of Chavín-style adoption into regions such as the south coast Ica Valley remains uncertain. In other areas, such as the north coast valleys, the lines between a local Cupisnique tradition and Chavín style have been seen as difficult to ascertain, supporting the need for more localized research and to address the larger cultural issues that encompass such stylistic differences.

The horizon framework correspondingly has included intermediate phases that occur between the three horizons. These periods – labeled ‘early’ and ‘late’ – were framed as the conceptual opposite of style horizons; that is, they marked greater regional diversity. As an example, it is during the Early Intermediate Period (100-800 CE) (Table 1.2), following the Formative Period Cupisnique and Salinar traditions, that Moche society developed along the north coast. Moche culture pertains to a network of regional centers that share a visual style and iconographic program, whose distribution remains largely exclusive to the north coast valleys.

Given this established regional framework, Larco Hoyle was able to delineate five chronologic Moche stylistic phases (1948), which have remained in use for over sixty years. Since then, Moche scholarship has continued to fine-tune these stylistic divisions; for example, by differentiating phases between the northern and southern Moche regions

(Castillo and Donnan 1994). Through these spatial and temporal parameters, Moche scholarship has framed a Moche stylistic ceramic sequence. Whether working broadly from the corpus or through stylistic phase distinctions, investigators such as Donnan (1975) and Bourget (2006, n.d.) have identified and examined various repeated motifs, prompting interpretations of conceptual themes, cultural practices and social structures. These studies have depended critically on a bounded though comprehensive view of a defined Moche visual corpus.

## **2.2 Cupisnique Visual Corpus**

In order to investigate Cupisnique iconography it is imperative to establish, like Moche studies, a visual corpus. This step is critical to further analysis of the Formative Period. Rather than address the broad scope of Chavín-related styles through one thousand (1000) years of development, the material data is increasingly sufficient to permit focus on one region and search for patterns, motifs, and visual themes that may define the more localized cultural manifestations. Undoubtedly, the most prolific and visually rich tradition during the Middle Formative Period is that of the north coast Cupisnique. By establishing a Cupisnique corpus, this will permit to pursue methodologies for its analysis and interpretation.

The corpus compiled for the current study comprises more than 350 so-called ‘Classic’ Cupisnique stirrup spout bottles, as well as ceramic and stone bowls and cups, bone and gold objects. As I discuss below, the ceramic stirrup spout bottles are defined based on a general shape to the spout and connecting stirrup-like handle. While the form of these features varies slightly across the sample, the general form as a type can be clearly grouped together for analysis. These Classic Cupisnique bottles also differ in color, design and decorative techniques. While it may eventually be possible for scholarship to subdivide the corpus based on these variables, I address them as a unit here based on current correspondence in the archaeological record and the repetition of

iconographic motifs across the styles. I return to these issues in my iconographic discussion of Chapter 5; however, I do not outright tackle the potential temporal, ideological, or regional distinctions among the stylistic variables. The rise in archaeological research may eventually make feasible a more fine-tuned analysis.

The majority of the objects lack provenance, having been looted from around the northern Andean regions of Peru. The corpus of artifacts currently pertain to private and museum collections located around the world, including Peru, the United States, Germany, and Denmark. Over the past thirty years, Dr. Alana Cordy-Collins, a leading scholar in Cupisnique studies and Anthropology Professor at the University of San Diego, California, has visited and photographed the majority of these collections. In August 2008, she graciously provided me access to her photo archive in exchange for digitalizing the extensive slide collection. Upon my return from Peru, following our excavations of the ‘Lord of Ucupe’ tomb at Huaca el Pueblo that summer, I spent two weeks digitalizing the slides at the University of San Diego. These images provide the most substantial foundation for my iconographic research. Many of the ceramic vessels in the slide collection have since been published in various volumes and articles (Alva 1986, Bonavia 1994, Donnan 1992, Lapiner 1976, Lavallo and Lang 1981, Castillo and Pardo 2009). The digital collection, however, permitted to work from a consolidated corpus, with multiple photo angles and details not always visible in the published formats. It also includes a number of private collections that are increasingly difficult to access. I thus remain grateful to Dr. Cordy-Collins for her generous contribution to my research and her open discussion about the materials.

In addition to the published images and digitalized slide collection, I had the opportunity to work with and photograph the collections at the Larco Herrera Museum in Lima and the Brüning Museum in Lambayeque. I also received gracious access to the collections from the Schaffhausen Museum, as well as the National Scotland Museum. As I mention in my acknowledgements, I remain very grateful to the directors and curators of these respected institutions for their interest and gracious access to the

collections. Through my investigations and research, I have visited a number of other collections and museums around the north coast, Cajamarca and Jaen. While I address the Cajamarca materials in Chapter 4, the others collections provide minimal information regarding the current investigation and thereby are not included here.

In order to address the concern of modern reproductions, I first base my analysis on published and documented ceramic bottles, predominately those that represent a repeated motif – or one that appears more than one instance. This logical restriction of my sample, however, is not always possible in practice. Therefore, I occasionally reference complex images reproduced in other contexts such as relief murals, gold ornaments or stone vessels. The visual corpus, however, is greatly enhanced and substantiated by a number of provenanced and archaeologically recovered materials. I thus draw extensively on location and context of recovered artifacts and monumental decorations to found an interpretation of a Cupisnique iconographic system.

## **2.3 Spatial and Temporal Frameworks**

For the establishment of a visual corpus to be productive, it is critical to establish certain parameters by which to frame an analytical study. The most relevant include a spatial range of the chosen ‘Classic’ Cupisnique ceramic style and a temporal schema in which to discuss their contemporary use and adoption across this defined region.

### **2.3.1 Stylistic Sphere**

Among the fineware ceramics, the most salient feature is the stirrup spout bottle. As presented in Chapter 1, recent studies by Elera (1998) and Toshihara (2002) have arrived at a relative consensus regarding the formal stylistic sequence, which is upheld by current research. In general, the ‘Classic Cupisnique’ style bottles – with their trapezoidal

or rectangular stirrups and tall spouts – precede the ‘Late Cupisnique’ style bottles – with their thick flaring lips, robust stirrup and body. The use of graphite paint (red-and-black) appears to fall between these two phases, while Chongoyape-style bottles enter at the end of the sequence (Table 2.1).

Cupisnique Ceramic Sequence
Classic Cupisnique
Transitional Cupisnique
Late Cupisnique
Chongoyape

Table 2.1

The ‘Late’ Cupisnique often boast stylized high-relief images. In contrast, the ‘Classic’ Cupisnique and Chongoyape bottles regularly exhibit incised motifs or modeled figures, which practice remains popular in successive north coast ceramic programs, such as Moche and Chimú.

The localized nature of the ‘Classic’ Cupisnique stirrup spout form makes it useful in providing a selective scope for this study.<sup>i</sup> Based on current archaeological data, such stirrup spout bottles have been recovered from the Moche Valley through the Lambayeque Valley. This is supported by the fact that ‘Classic’ style bottles have not been found south of the Moche Valley, in the Virú or Casma Valleys (Zoubek 1997). Given this apparent spatial boundary, I have thus adopted the framework in which the Andean coast (and highlands) of Peru are divided into roughly five zones: north, north-central, central, south-central and south (Map 1). Only the first three zones (north, north-central and central) will be addressed in the remainder of this analysis, leaving aside any cultural connections with the southern regions for future studies. In this thesis, I focus on



the north coast Classic Cupisnique, with comparisons to the impressive monumental centers of the north-central and central coasts (Maps 1-2).

Paralleling the coast, the ‘Classic’ Cupisnique tradition also extends into the north and north-central highlands, at sites such as La Bomba (Upper Jequetepeque), Cerro Blanco (Upper Jequetepeque), and Huacaloma (Cajamarca Basin), La Pampa (Upper Santa), and Chavín de Huántar (Upper Mosna) (Lumbreras 1993, 2007; Onuki 1995; Seki 1998; Terada 1985; Terada and Onuki 1982, 1985). The presence of Classic Cupisnique ceramics at Huacaloma in the Cajamarca basin is particularly significant for this study. The stirrup spout bottles appear during the Late Huacaloma phase (1000-500 BCE) at this site and evince the integration of this eastern highland region into an extensive north coast interaction sphere.

This integration of the Cajamarca region into a Formative Period interaction sphere is supported by the broad distribution of a local Late Huacaloma red-on-orange ceramic style, which appears in the Gallery of the Offerings at Chavín de Huántar (Mosna style), alongside imported coastal Cupisnique styles (Wacheksa and Raku). This regional connection will be discussed further in Chapter 4, following a review of the role of local ecology and subsistence across these interactive zones in Chapter 3. For now, it is important for defining the spatial extent of Classic Cupisnique culture.

As this review suggests, Classic Cupisnique materials have appeared at monumental centers throughout the northern regions of Peru, with trade evident into Chavín de Huántar. Nevertheless, much of the corpus yet derives from extensive looting throughout these northern regions. Early archaeological excavations at many of the monumental centers have further afforded limited ceramic analysis and radiocarbon data; however, recent research is greatly enriching our understanding of the temporal placement of this corpus.

### 2.3.2 Chronological Schema

In this thesis, I adopt the chronological schema first outlined by Luis Lumbreras (1989) and most recently modified by the Archaeological Mission of the University of Tokyo (Shibata 2004), which subsumes the late Preceramic through Early Horizon under the consistent heading of a ‘Formative Period.’ The sequence parallels the Preceramic-Initial Period-Early Horizon time sequence set out by Rowe (1962a); the former simply equating to ‘Early,’ ‘Middle,’ and ‘Late’ periods. Two additional phases at the beginning and end of this sequence achieve the following (Table 2.2):

<b>Temporal Framework</b>	
Initial Formative	2500-1800 BCE
Early Formative	1800-1200 BCE
Middle Formative	1200-800 BCE
Late Formative	800-250 BCE
Terminal Formative	250-50 BCE

Table 2.2

By the final phase end, regional styles markedly diverge, such as Cajamarca style in the north highlands, the Gallinazo style on the north coast, and the Huaráz style at Chavín de Huántar.

The term ‘Formative Period’ thus encapsulates the related early developments throughout these regions. Likewise, it permits to compare contemporary cultures on the north coast and in the central highlands without clarifying their relationship to the Chavín style horizon. In other words, should we not wish to do away with the concept of a Chavín horizon, this schema permits greater ease in talking about its development within the Formative Period. Furthermore, the term leaves aside the debate surrounding the

Early Horizon dates and Initial Period coastal ‘collapse’ (Pozorski 1983; Burger 1988, 1993). Rather it supports a view toward defining continuous occupation along the coast, which may be clarified through future archaeological research (Chapter 3, 6). Given all of these variables and my research in the Cajamarca region, I ally this study with the Formative Period chronology recently propelled by Seki and Kato (1998, cited in Shibata 2004). The subdivisions of Initial, Early, Middle, Late, and Final serve as specific phases under which the various material traditions mutually develop and interact.

Based on current data, the north coast Cupisnique tradition appears to fall within the Early-Middle-Late Formative Periods, with the Salinar and Layzón traditions emerging in the Terminal Formative Period (250-50 BCE). More specifically, the Classic Cupisnique style – which is the central focus of Chapter 5 – takes place during the Middle Formative Period (1200-800 BCE). Recent research has evinced this tradition across the northern regions during this relative time frame. In comparison, the Cumbemayo Canal appears to fall within the Middle to Late Formative Period of the Late Huacaloma Phase (1000-550 BCE) (Chapter 4). In Chapter 6, I return to this temporal sequence in proposing the development of Cupisnique ideology, and its materialization.

## **2.4 The Archaeological Record**

### **2.4.1 Archaeological Context**

Archaeological context is critical in the investigation of a prehistoric system, for recovering material data, its association with cultural features, and the dating of artifacts. The contexts may vary from monumental architecture and high-status burials to domestic occupations and public cemeteries. Other features such as agricultural fields disappear from successive reuse of the lands and erosion from natural events. Therefore, the bias in Formative Period archaeology is toward burials, cemeteries, and monumental sites.

Burials currently provide the contexts most conclusively identifiable as Cupisnique along the north coast. Larco Hoyle was the first to excavate Cupisnique burials from the Hacienda Sausal in the Chicama Valley. From his research, Larco cites consistencies in tomb shape, body layout, and associated material goods (1941). For example, he notes the regular use of oval or circular tomb pits, flexed positions of the bodies, red cinnabar over the deceased, and limited burial goods – including only one to two ceramic vessels. Other interesting elements include the absence of metal objects and the customary presence of anthracite mirrors and items of adornment, such as bone rings and earplugs. These features have been reiterated by the research of Elera at Puémapé (1998), Alva in Talambo (1986), and Seki at La Bomba (1998). They may elicit a pattern of symbolic practices that identify this cultural group.

Regarding occupational centers, minimal published information is currently available for domestic contexts clearly associated with Classic Cupisnique materials. In 1946-1947, Junius Bird excavated a domestic Cupisnique area near Huaca Prieta in the Chicama Valley (HP-5; see Toshihara 2002). Located 150 meters north of the Preceramic mound, such occupations boasted a few plain Classic Cupisnique bottles, ceramic seals, modeled figurines and anthracite mirrors. Yet Bird maintained a focus on the Preceramic materials and published limited information on these later contexts (Bird, Hyslop and Skinner 1985). Elera encountered domestic layers at Puémapé (1998); however, the strata pertain largely to Early Formative (Early Puémapé) occupations. As such, they correspond to the domestic architecture excavated at Monte Grande in the Jequetepeque Valley (Tellenbach 1986).

Similar to domestic settings, there remain a limited number of monumental centers with documented remains of Classic Cupisnique stirrup spout fragments. The ceramic evidence is often limited, and there exists diversity in the associated architectural design. The monumental centers, however, generally boast certain analogous features. These include the use of frontal columns in monumental architecture, a U-shaped site or building layout, and an overall orientation toward the northeast/east. Columns on the

coast may be composed of conical adobes or cane plastered with clay stucco, and they may be decorated with painted or high-relief images. While few examples still exist, such column forms appear at Caballo Muerto, Purulén, and Huaca Lucia (Alva 1988a; Pozorski 1983; Shimada, Elera and Shimada 1982), and they are reported from the Hacienda Casa Grande and Limoncarro (Kosok 1965; Map 2). In comparison, columns at highland sites tend to be made of stone with low relief surface carving. These appear at Congoña, Pacopampa and Kuntur Wasi (Onuki 1995), as well as Chavín de Huántar (Rowe 1962). At least three pairs of columns reportedly depict complex avian images (Casa Grande, Congoña and Chavín de Huántar), including coast and highlands samples. I address this aspect further in Chapter 5.

The coastal construction with conical adobes is a technique exclusive to the Formative Period. Conical adobes appear in a number of early north-central coast sites (ex. Cerro Sechín, Cerro Blanco) and have been reported from Middle Formative Period north coast centers (Huaca Lucia, Huaca Prieta, Casa Grande, Caballo Muerto), in addition to cylindrical adobe and stone construction. As Toshihara notes (2002), Cupisnique architecture on the north coast is not solely tied to conical adobe construction. Nevertheless, the conical and cylindrical adobes remain exclusive markers in the northern regions of Formative Period architecture.

During this extensive period, stone construction also appears in both coastal and highland centers, varying from compact river cobbles to cut masonry architecture. There does not appear to be a consistent temporal pattern or relationship of stone versus adobe construction; however, the use of river cobbles generally precedes large-cut stones. The former occur in Initial-Early Formative (2500-1200 BCE) sites such as La Galgada, Sechín Bajo, and Caral. In contrast, the latter are quite popular in Middle-Late Formative Period (800-250 BCE) centers, such as Puémape and Limoncarro on the coast and Kuntur Wasi, Pacopampa, Huacaloma, Layzón, and Chavín de Huántar in the highlands.

Along with early masonry construction, stone-lined canals appear in such monumental architecture during the Middle Formative Period (Chapter 4). Stone channels appear in contemporary constructions at Huacaloma, Poro Poro, Kuntur Wasi, Pacopampa, Huaricoto, and Chavín de Huántar. In the latter three monumental centers, the use of canals substantially increases from Middle Formative to Late Formative Period building phases (Seki, 2009 personal communication; Onuki 1995). The expanded incorporation of such channels suggests greater symbolic importance to this construction feature. While certain canals may have served a practical function regarding drainage, the majority present no obvious utilitarian purpose (Burger 1985; Onuki 1995; Terada and Onuki 1985). The presence of such monumental stone-lined canals contemporary with Classic Cupisnique bottles at various north highland sites led me to investigate the most prominent local example – the Cumbemayo Canal (Chapter 4).

In Chapter 4, I address the Formative Period in the Cajamarca basin through the mapping and analysis of the Cumbemayo Canal, an impressive carved stone channel that extends over 850 meters through an Andean quebrada. As I demonstrate, the archaeological materials and architectural patterns in the Cajamarca region provide sufficient data for local contextual analysis. In order to interpret the symbolic import of this feature, however, I turn to an extensive visual analysis of the canal form and associated petroglyph designs to link the water architectural feature into a larger Cupisnique ideological system. This inspired the Cupisnique ceramic visual study.

#### 2.4.2 Visual Materials

The meaning of visual materials is best fleshed out through examination of the larger cultural context, the archaeological and visual record. In particular, the compilation of a stylistic corpus may provide a comprehensive source by which to interpret the role of an object (part) within the culture (whole). It is within the visual corpus that the role of specific indexes becomes more explicit and impactful.

Nevertheless, there are two notable methodological issues that emerge. First, interpretations of visual data are influenced by the perspective of the interpreter. That is to say, ancient artifacts (especially representational images) may be analyzed based on pre-conceived notions and established interpretive frameworks. To confront this issue, I would argue that the more comprehensive the corpus of study (within the established temporal and spatial frameworks), the greater fit will be achieved in corresponding representations with relevant interpretation. An established corpus permits scenes to be amalgamated into themes and tested against other themes. As discussed below, a successful example of this approach may be found in Moche iconographic studies.

This leads to my second position, namely that comparative data may enhance levels of interpretation when it does not breach the analytical limits set by cultural disjunction. Some of the most salient insights into Cupisnique iconography have derived from researchers with a firm base in north coast traditions, Cupisnique through Moche cultures. Yet comparisons with modern practice, such as *curandismo*, present a considerable temporal disjunction and non-local cultural influence that may bias a more thorough examination of the ancient contexts.

For this thesis, I compare Cupisnique material with cultures contemporary in space, time and visual style. These include coeval north-central coast sites, north highland centers, and Chavín de Huántar. Given a presumed and documented degree of trade, influence and interaction among these regions and centers, the comparisons I draw are visual and interpretive, as well as methodological. These three surrounding regions have received more iconographic and archaeological studies, which provide investigative approaches and theoretical models applicable to the north coast Cupisnique. Of these three regions, the site of Chavín de Huántar has undoubtedly drawn the greatest scholarly attention, serving as the type-site for the presumed cultural horizon spanning this geographic area. Therefore, I address below certain key methodological approaches taken with regard to Chavín de Huántar that prove relevant for entering into an analysis of Cupisnique culture.

In addition to such contemporary regional cultures, I further examine Cupisnique iconography through comparison with the succeeding north coast Moche culture. Since direct comparison with Moche society and iconography presents issues of cultural disjunction, the most salient elements of Moche scholarship applicable to the current investigation are methodological and multi-disciplinary approaches. Such Moche scholarship has recently propelled the field into a rich investigative depth. In the following sections, I thus discuss the nature of Moche iconographic studies and research that I apply to the present analysis and offer potential for ongoing Cupisnique studies.

## **2.5 Model Approach to Chavín Iconography**

The monumental center of Chavín de Huántar rests to the east of the Cordillera Blanca at the confluence of the Wacheksa and Mosna Rivers. The stone monumental construction is decorated with numerous sculpted cornices, ashlars, and stele, which variously represent stylized anthropomorphic figures and idealized zoomorphic forms with feline, avian, monkey, and serpent qualities. Although ceramic sequences exist for Chavín de Huántar, Chavín style is largely defined based on the stone sculptures, their iconography and formal conventions.

### **2.5.1 The Stone Sculptural Program**

Tello was the first to discuss the nature of Chavín sculptural design, in which he notes the role of idealization, substitution and elimination (1960). By these terms, Tello refers to Chavín figures that are recognizable despite their stylized rendition and the addition, or exclusion, of features. For example, a sculpted feline may exhibit the recognizable ears, fangs, claws and tail while boasting animated (i.e. with eyes and mouth) hair, whiskers, and ankles.



In the 1960s, Rowe recognized these features as comprising a relationship between primary images and a set of subsidiary elements. In his fundamental writing on the Chavín stylistic sequence (1962), Rowe identifies conventions utilized to combine these features in a visually and cognitively stimulating manner. Influenced by semiology, Rowe equates these artistic features and conventions to a ‘grammar’ and ‘syntax,’ proposing that “the problem of understanding what they meant to say is indeed comparable to the problem of deciphering an unknown script” (1977: 321). Rowe then considerably extended this comparison to introduce the term ‘kenning’ into Chavín studies (see below). Regardless of the continued utility of such terms, semiotics continues to offer a stimulating model for visual analysis. Finally, when examined as a set, the visual conventions may evince certain ideological concepts (ex. symbolic duality) developed through these shared iconographic systems.

### 2.5.2 Visual Conventions

The Chavín conventions, which were first outlined by Rowe (1977) and modified by Burger (1992), include anatomic design, contour rivalry, kennings, bilateral symmetry and modular width.<sup>ii</sup> The latter two conventions are considered universal properties of style. They are modes of design that appear across culture groups based on natural aesthetic preferences extended onto cultural ideals. For example, Dorothy Washburn has performed foundational studies on bilateral symmetry in art, its correspondence with early cognitive development and human perception (1999). The application of modular width references an image laid out with regularly repeated elements. In the ancient Andes, it may derive from creating patterns on a transferrable medium for systematic reproduction of design units (Roe 1974). Modular width, however, is not unique to Chavín art but occurs in other Andean art traditions.

Bilateral symmetry also boasts extensive use within Chavín de Huántar; however, it is rarely exact in design (Rowe 1977). True bilateral symmetry usually occurs *within*

features of a primary image and is thus intimately associated with modular width and contour rivalry. In contrast, the programs comprising multiple primary images at Chavín de Huántar regularly modify the bilateral layout to create a visual duality. In other words, most central axes at Chavín – for example, the columns of the Black and White Portal – render a juxtaposition of nearly identical forms that imply a symbolic dyad through their representational dissonance (Fig 1.9). In this regard, the near symmetry corresponds with anatomic design and contour rivalry in the creation of compositional tension.

As conventions, anatomic design and contour rivalry are more complex, and thus more culturally specific, than symmetry and modular width. Anatomic design is the ability to rotate an image 180 degrees to perceive a new design, which shares in the original configuration. A well-known example occurs within the Raimondi Stela from Chavín de Huántar (Fig. 1.10). Contour rivalry occurs when the viewer may perceive two different scenes within one figure, depending on the chosen contours. In Chavín iconography, contour rivalry often plays out as tension between visualizing one frontal image or two profile forms (Fig 2.1). The two concepts both address the complex interweaving of two images into one form, juxtaposing them in a symbolic visual tension. Their configuration may be significant in examining what forms are intentionally paired or contrasted. In such manner, these visual conventions compare with the use of ‘kennings,’ the final noteworthy Chavín-style convention.

The term ‘kennings’ derives from Old Norse poetry and denotes a figurative device in which a metaphor is further abstracted into a combination of two unrelated terms to signify a third concept. Rowe provides the comparative literary example of ‘seal’s field’ to describe a wave (1977: 314). John Rowe defined ‘kennings’ in Chavín sculptural design as the display of visual metaphor in a figural form, between a primary image and a secondary element. For example, he posits that a snake appearing as the whiskers of a feline serves as a visual ‘kenning’ (Fig. 2.2). This oral/literary device, however, has no real correspondence in visual media, where the part-to-part or part-to-whole relationship (the metaphor) is visually explicit. In other words, the audience

witnesses the metaphor: ex. a snake form as the feline whisker or a row of teeth (mouthband) as a vertebral column.<sup>iii</sup>

By utilizing the term ‘kenning’ to describe such Chavín conventions, this asserts that such correspondences are “unintelligible without prior knowledge of the imagery or the story being related” (Burger 1992: 146). Yet ‘Chavín’ style would not have appeared over such a large region if it were incomprehensible to its constituents. As Burger notes:

Like Old Norse kennings, Chavín “kennings” likewise offered the artist the potential of non-repetitive elaboration of a limited thematic repertoire. However, unlike Old Norse Poetry, the range of metaphors utilized at Chavín de Huántar was quite restricted. A more fundamental difference is that Old Norse kennings were stylistic conceits, whereas the Chavín kennings were highly charged multivalent religious symbols (ibid.)

Although I might replace ‘religious’ with ‘ideological,’ I agree with the observation that Chavín art presents a creative combination of symbolic motifs and themes, which together (as a restricted set) index the overarching cultural tradition or ideology.<sup>iv</sup> In order to engage such analysis, as I do for Cupisnique visual culture, it is necessary to establish certain presumptions about the manner in which such visual elements function. The methodology draws on semiotics and agency, adapted to visual culture studies.

### 2.5.3 Semiotics: Index and Agency

In art historical research, the focus is on the *art object*, with the iconographic analysis and historical research giving context *to* the object. The object in turn reflects or enhances an understanding of the historical period and place to which it pertains. In contrast, archaeologists dealing with prehistoric contexts – such as the ancient Andes – may utilize the visual objects to *frame* social histories and to determine cultural ideals. In his volume, *Art and Agency* (1998), Gell notes that formal properties of objects present

the most definitive aspects of style. He thus frames 'style' in his 'anthropological theory of art' as that which most often defines a culture rather than an individual artist, school of artists, or period in art development. An "anthropology theory of art...explore[s] a domain in which 'objects' merge with 'people' by virtue of the existence of social relations between persons and things, and persons and persons *via* things" (ibid.: 12). In other words, cultural styles serve as explicit medium of social expression.

Although research in the ancient Andes has tended toward style typologies, the figural and abstract elements provide the most salient cognitive features. The cognitive classification requires seeing the *agency* behind, and between, visual forms. Gell defines *agency* as "attributable to those persons (and things...) who/which are seen as initiating causal sequences of a particular type, that is, events caused by acts of mind or will or intention, rather than the mere concatenation of physical events" (1998:16). In other words, an object or image (figural or abstract) is the purposeful creation of a social agent (i.e. artisan, architect, society). The object or image, however, may also act as an *agent* in relation to other objects or images, based on its ability to manifest social 'presence.' In this regard, decorative elements may be intimately tied to the larger object, reflecting agency (artistic or cultural) in their arrangement.

In contrast to the model of 'kennings,' this theory permits to examine secondary elements and primary forms as *indexes* in a complex visual system, manifest through social agency. Gell draws the term 'index' from the semiotics of Charles Sanders Pierce, defining it as "a 'natural sign,' that is, an entity from which the observer can make a causal inference of some kind, or an inference about the intentions or capabilities of another person." In other words, "*the index is itself seen as the outcome, and/or the instrument of, social agency*" (1998:13-15, italics in original).<sup>v</sup> For example, concentric circle designs or cross shapes may appear independently on ceramics or as secondary elements on a primary zoomorphic figure, in both cases serving as *indexes* of the larger visual program. The connection between these abstract forms and their use on primary figural images was most likely comprehensible to the intended audience or group.

Within the larger visual system, the *indexes* (objects and images) may be traced for patterns and association. Although Roe had attempted to track the secondary features, he did so only in the context of mapping the extensions of Chavín style (1974). Thus, the boundaries of a Chavín culture yet remain obscure, blurred by a broad expanse of interactive stylistic traditions. The north coast Cupisnique, on the contrary, holds potential for such analysis, with its large ceramic corpus suggesting an intensive visual program. In this regard, I agree with Toshihara that “considering the large variety of the motifs represented on ceramics, the lack of Cupisnique iconography is hardly understandable. It is one of the aspects of the Cupisnique study which needs to be urgently worked on.” (2002:79). As I demonstrate in Chapter 5, these various motifs may be consolidated into an interactive set of complex themes, whose distribution reflects the development of social complexity and cultural ideology. It is thus worth defining this final term and the manner in which identifying visual indexes may enrich an interpretation of ‘ideology’ in prehistoric ancient cultures.

#### 2.5.4 Materialized Ideology<sup>vi</sup>

Given the absence of written text in the ancient Andes, material culture – art and architecture – provides the most insightful record of social formation, ideas and agency. Visual culture in particular serves as a medium of communication between people within and across cultural groups. As Hodder notes, within the development of complex social systems, such “material resources are themselves parts of the ideological apparatus.” (2003: 88). The term ‘ideology’ may be variously defined, from a more socio-political to religious-cosmological role, depending on the theoretical outlook of the investigator. In this thesis, I address it as *the systematic set of shared concepts that reflect aspects of social life, ritual or cosmology*, thus engaging sacred and secular domains. It is the ability of the term ‘ideology’ to embrace social, political, economic, and ceremonial practices

that makes the term so applicable, as these domains may not be readily discernable or distinguishable in the archaeological or visual record.

Given the historic development of the term, however, an ‘ideology’ is often addressed as being imposed, directed or promulgated by a dominant minority for the sake of power and legitimacy. In other words, the use of ‘ideology’ generally assumes a degree of social complexity and stratification. The visual media then become a critical resource for the active promotion and dissemination of a governing or group ideology(s). That is, “materialized ideology molds individual belief for collective social action. It organizes and gives meaning to the external world through the tangible, shared forms of ceremonies, symbols, monumental architecture, and writing. Materialization of ideology is at the same time a strategic process in which leaders allocate resources to strengthen and legitimate institutions of elite control.” (DeMarrais 1996: 16) The principal agents guiding the ideological formation and its continued development, however, are not always perceptible in prehistoric contexts.

The ideology of an ancient society may be difficult to determine archaeologically, where few tangible aspects of ritual and ceremony remain alongside the material record. Nevertheless, sufficient evidence exists by which to advance interpretations of cultural practice, beliefs, and organization – and thus their overarching conceptual system. In his studies of ancient Andean architecture, Moore demonstrates the power of built space to reflect and shape cultural identity, ritual and performance, social status and boundaries. For the Formative Period, he asserts that “ritual architecture was the first product of coordinated social effort in the Andes” (2005: 164), which coordination and motivation demand explanation. The ‘coordination’ presumes the presence of social elite to mobilize labor. The ‘motivation’ may be investigated via the design and decoration of monumental constructions toward ritual or symbolic ends.

When such monumental features complement those concepts rendered in high-quality portable objects, this suggests their associated role in developing collective

identity, or materialized ideology. For example, an elite individual may don objects of adornment that visually manifest and display his/her connection to the ideological system. Other personages may be buried with specific objects that reflect their particular role within a social or ritual system. In such cases, the objects serve as *indexes of social agency as ideological participant*, where the material indexes perform not as the outcome, but rather the instrument, of social agency. For as Gell reminds us, “the causal chains which are initiated by intentional agents come into being as states of mind, and... they are orientated towards the states of mind of social ‘others’ (1998: 20). Therefore, they reinforce the system via individual display of a collective ideology.

The visual representations on portable objects or monumental arenas generally index the ideological system through close resemblance to a symbolic or meaningful ‘prototype.’ Gell defines ‘prototypes’ as “entities held, by abduction, to be represented in the index, often by virtue of visual resemblance, but not necessarily.” (ibid.: 27) If the prototype is a natural object, then the identification may be fairly direct; if it is a non-natural concept (divine, an-iconic), then the association may require understanding of the symbolic system. As Gell notes (drawn from Charles Sanders Pierce), an outside investigator enters such interpretation by *abduction* – that is, by positing a ‘best-guess’ identification of a prototype, which theory may be tested repeatedly against a corpus of other examples for accuracy and fit. This approach presumes that the ideological system under scrutiny was founded and maintained (as well as transformed and modified) by creating visual correspondence and symbolic repetition between and across indexes – that is, it functions as a reticular visual program. For example, a common hexagonal pattern on a Cupisnique ceramic may reference a spider web, basket-weave, or fishing net by the visual connections created between these prototypes (Chapter 5). The abstract rendition of the hexagonal design, in fact, permits its conceptual fit with three symbolic prototypes, cognitively connecting their meaning and substantiating the larger ideology.<sup>vii</sup>

It is important to distinguish, as Gell does, between ‘abstract’ and ‘geometric’ indexes and purely ‘decorative’ designs. According to Gell, ‘decorative’ elements are

those designs with no immediate ‘prototype,’ whose indexical function pertains only to the relationship they create with the object they adorn. The abstract patterns may convey motion, symmetry, repetition, balance, and other desired qualities. They serve to attach people to artifacts, as to their symbolic value (*ibid.*: 73-80). There exist a number of so-called ‘decorative’ elements in Formative Period visual culture. Indeed, they often comprise the typological databanks of the archaeological research (ex. rocker-stamping, finger-pressed ribs, appliqué bands, crosshatching, burnished lines, etc.). Many of these techniques are applied to objects contemporary with the figurative designs. Nevertheless, I avoid discussing purely decorative forms here given the lack of direct interpretive value.

The abstract or geometric forms that I address in Chapter 5 rather pertain to elements that likewise appear on representational images, suggesting their indexical nature to this larger ‘prototype.’ For example, the concentric circle designs appear on primary feline images, resembling feline pelage markings in an abstract, geometric manner. Scholars such as Larco (1941) and Burger (1992) have thus identified the patterns of concentric circle stamps on various Formative Period ceramics as recalling the feline image through an abstracted symbol system. Although I do not dispute this interpretation of the design, I suggest that a more extensive review of the concentric circle element evinces its role as an index of a larger visual theme (Chapter 5). The notion of ‘kenings’ fits well in this type of analysis, where the profusion of animated features (hair, joints, feathers, etc.) conceptually links together certain primary figures into a collection of supernatural/divine beings or concepts.

The visual conventions cited above for the sculpture from Chavín de Huántar notably appear – to varying degrees – in Classic and Late Cupisnique iconography and visual media. This includes the more ‘complex’ conventions of contour rivalry, anatomic design, and subsidiary elements (i.e. ‘kenings’) (also Elera 1998). These stylistic features may be traced in Cupisnique iconography; however, to determine their meaning demands interpretation of the corresponding iconographic program. Moche iconographic



studies offer an exciting, productive and multidisciplinary approach to such complex visual corpuses.

## **2.6 Model Approaches to Moche Iconography**

Moche culture succeeds the Cupisnique on the north coast, following the intervening Salinar, Virú and Gallinazo cultures.<sup>viii</sup> In their greatest regional expansion, the Moche society spanned from Piura to Huarney Valley developing a vibrant coastal culture based on irrigation agriculture. The Moche occupied the north coast throughout the Early Intermediate Period (100-800 CE), during which time they produced hundreds of thousands of decorated ceramic vessels, metal ornaments, and monumental murals. Similar to Cupisnique studies, the exceedingly rich body of Moche visual materials has resulted largely from extensive clandestine activities; however, it is enhanced by more than one hundred years of focused archaeological excavations.

Although the temporal span between Classic Cupisnique and Moche Phase I/II ceramics may be nearly 1000 years (800 BCE-200 CE), three critical components justify their comparative analysis. For one, there are aspects of cultural continuity that appear through the Late and Final Formative Periods (800-50 BCE), reducing considerably the perceived temporal gap (Chapter 5). Secondly, the Moche intentionally adopt and adapt preceding Cupisnique forms. For example, high-relief polychrome murals fronting the northern façade at Huaca de la Luna in the Moche valley capital center of Huacas de Moche represent Cupisnique-like anthropo-zoomorphic figures, such as the Spider Decapitator (Chapter 5). Finally, the comparison that I draw with Moche iconography is rarely of direct correspondence, but rather based on methodological approach. The recent success of Moche studies provides an enticing model for interpretive frameworks applicable to the expanding Cupisnique research. These include the Thematic and Narrative approaches, as well as conception of ritual ecology.

### 2.6.1 Thematic Approach

In 1975 Christopher Donnan first defined a thematic approach to Moche iconography, by acknowledging that Moche iconography consists of a few scenes and characters that repeat across the visual corpus. The scenes – or themes – may be recognized in full illustration, with all the elements present and actions depicted. The Moche may also reference particular themes through the illustration of partial scenes or just one figure, often presented in modeled form. In other words, the restricted set of Moche symbolic themes could be presented either in full or reduced format, in either case recalling the complete intended meaning, ritual, or myth.

In the initial publication of the thematic approach, Donnan focuses on a limited set of similar painted fineline scenes in Moche iconography (Donnan and McClelland 1999: Fig. 4.102-4.104). He labels these scenes the ‘Presentation Theme’ since it “involves the presentation of a goblet to a major figure” (1975: 148). In order to trace their iconographic distribution, Donnan alphabetically labels each individual and symbolic element. He posits that the isolation of such figures yet recalls the complete scene and its larger meaning, such as Figure B isolated as a modeled ceramic (*ibid.*; Donnan 1978: Fig. 248, 250). In other words, the thematic approach suggests a set of complex themes from which indexes and visual representations may be selected and creatively combined by the ancient artisan within a limited conceptual framework.

This method of analysis thus introduces predictability in iconographic studies, where scholarship may “go beyond a simple explanation of a given piece and to search for a basic theme to which it belongs” (*ibid.*: 162). Such predictability becomes relevant not only in identifying genuine Moche artifacts versus modern reproductions. It introduces an aspect of ‘testability’ into visual analysis, by ‘testing’ representations and indexes against more complex scenes and their interpretation.

Addressing the meaning of such thematic approach, Elizabeth Benson offers the term ‘shorthand’ to describe this notion of symbolic reduction. She argues that “the ceramics do not reproduce scenes or objects in detail; they present certain basic material and... numinous information, often quite minimally. Moche images seem not intended to describe, explain, or explore, but to convey core meaning” (2008: 5-6). In other words, the selective themes, symbols and designs in Moche iconography essentially *index* intrinsic cultural values, as a materialized ideology.

Since Donnan’s initial study on the Presentation Theme (i.e. Sacrifice Ceremony), other visual themes have been identified and examined in Moche iconography. For example, there are themes of ritual hunting, both of deer and sea lions, with either feline or anthropomorphic hunters. These animal hunt scenes are presumed to hold parallel meaning with the scenes of human battles, from which victims are chosen for sacrifice (Donnan 1997). Jeffrey Quilter has devoted considerable attention to a visual theme that he terms the ‘revolt of the objects’ (Quilter 1990, 1996). In these scenes, warrior accoutrements and elite ornaments become animated with eyes, arms and legs, and these objects capture anthropomorphic victims (Donnan and McClelland 1999: Fig. 4.70, 5.74). Such animated warrior implements become independent elements in the iconography (ex. *ibid*: Fig. 5.21). The themes thus appear as individual components or complex scenes.

Furthermore, these particular themes relate conceptually to each other and to the Presentation Theme. As such, they highlight the interconnected – or reticular – nature of the identified visual motifs and support the concept of ‘shorthand’ proposed by Benson (2008). In other words, the conceptual units of themes relate to each other as shorthand versions that each references a larger Moche ideological system. The nature of the visual program then poses the problem of how to interpret and understand the greater system based on these interconnected themes – as narrative structures, enacted ceremonies, or cosmologies.

### 2.6.2 Narrative Approach

In Moche iconography, the identifiable themes often appear painted in a sequence or by frames that suggest an ordering of events, or narrative sequence. In some cases, Moche ceramics illustrate complex fineline paintings where identifiable ‘themes’ or scenes spiral up the bottle, making implicit a sequential progression (ibid.: Fig. 4.97, 5.76-5.77). The narrative approach thus implies a temporal order to the illustrated actions.

Scholars have proposed various explanations for such narrative representations, comparing them to later Andean rituals (Hocquenghem 1987, 2008) or to myths told by the Inca or other pre-Columbian groups (Quilter 1990, 1997). Others have organized the events based on comparisons within the Moche visual corpus (Bourget 2006). The ‘proper visual reading’ of these scenes continues to be a matter of debate and research.

Nevertheless, the Narrative Approach is significant to compare with Cupisnique studies and the application of a Thematic Approach. In early Moche ceramics (Phase I/II, III), for example, the scenes – or themes – appear to be more distinct, rendered independently or as abbreviated symbols. By Phase IV and V, more scenes and sequences are illustrated together. This situation may be due to the greater complexity in fineline painting by later stylistic phases, as well as potential changes in ritual and ideological display. It does not preclude the possibility that the early ‘simple’ scenes functioned as ‘shorthand’ illustrations and formed part of an established ritual or mythical sequence. As such, a thematic approach must remain open to examining the possible connections between seemingly independent scenes, which may yet form complex integrated mythological or ideological concepts – as a type of narrative sequence. I address this problem regarding the anthropomorphic figures in Cupisnique iconography (Chapter 5). It further underscores the difficulty of distinguishing myth from practice in the representation of certain scenes.

### 2.6.3 Theme to Ceremony, Myth to Ritual

The Presentation Theme first appears during Phase IV of the Moche stylistic sequence, and its complete representation occurs largely in the *southern* Moche realm (Bourget n.d). By the late 1980s, however, research in the *northern* Moche region revealed the actual personification of these represented individuals in the archaeological record. As mentioned in Chapter 1, in 1987 Walter Alva began excavating high-elite tombs at the site of Sipán in the northern Lambayeque Valley. Tomb 1, known as the Lord of Sipán, produced a number of gold and silver objects, necklaces, headdresses, and back flaps. Among this material were elements that clearly identified the main occupant as Figure A from the Presentation Theme (Alva and Donnan 1993). The Sipán tomb thus evinced that the Moche themes may literally be ‘read’ as enacted performance. Based on this one-to-one correlation between the representation and action, Donnan modified the title of these particular scenes from ‘Presentation *Theme*’ to ‘Sacrifice *Ceremony*’ (ibid.).

Since the discovery at Sipán, Moche scholars have identified a number of additional burials and sacrificial contexts that correspond to individuals or scenes in the iconography. These include the identification of Figure C at San Jose de Moro (Castillo and Donnan 1994), Figure D in Tomb 3 at Sipán (Bourget 2008), and Figure E at Huaca de la Cruz (Arsenault 1994), as well as the Coca-Takers at Huaca de la Luna (Uceda 2008), Ritual Runners and a Badminton Player between the Huacas de Moche (Donnan 1985). Ritual items used in scenes also appear in the archaeological record, with evidence of their use (Bourget and Newman 1998). Therefore, it is clear that by the Early Intermediate Period (100-800 CE) on the north coast of Peru, the high status material culture and iconography served to display a series of rituals, performances and concepts that were physically donned and enacted in Moche society.

Moche material culture makes visually explicit a developing ideological system. Though the nature of Moche ideology remains a matter of debate, it was clearly capable of socially binding monumental centers throughout the north and north-central coasts.

Such ideological cohesion is evinced primarily by the regional distribution of the Presentation Theme/Sacrifice Ceremony, where the complex iconographic scenes are known so far only in the southern Moche realm and the enacting elite personages have only been found in the northern Moche realm. Once again, the limited range of complex scenes does not preclude the more expansive spatial range of the overall theme.

#### 2.6.4 Structure and Ecology

Not all of Moche iconographic themes and motifs associate directly to enacted performance, myth or social roles, however; and this ‘agency’ approach may diminish the symbolic value of visual conventions. For example, Moche iconography repeatedly incorporates visual references to symbolic dualities or ritual inversions, through the juxtaposition of subjects, colors, textures, or abstract motifs (Bourget 2006, n.d). When these symbolic conventions are interwoven into scenes, they appear to provide the social roles and rituals with cosmological depth.

The same conceptual play appears to take place through the contraposition of animal species and their natural compartments into a dualist system and cultural ideology (Bourget 2006, n.d). For example, Moche iconography illustrates a number of animal and plant species, which are rendered identifiable by details or symbolic features. Rather than haphazardly citing all species local to the north coast environment, the Moche reference a specific floral and faunal set. The iconographic corpus includes species associated with concepts of capture and sacrifice (decapitation), with fertility and abundance, and with the influx of El Niño events into the Peruvian north coast (Bourget n.d.).

The chosen ecology is thus symbolic and structured in accordance with an overarching cosmology or ideology. This theoretical framework is distinct from those posited through the lens of cultural ecology or cognized environment by *structuring* the ecology – animals, plants and environmental phenomena – and perceiving it through a

cultural lens. The Moche visual system thus suggests that a complex iconography comprised of artistic conventions, figural scenes, and biological representations, may be examined through the selected ecology and the visual-encoding symbolic duality.

As I demonstrate in Part II, especially in Chapter 5, such methodological principles from Moche studies may be readily and productively applied to Cupisnique studies. The particular themes, concepts and ritual ecology approaches all have value in Cupisnique iconographic analyses. The Cupisnique tradition in monumental centers and elaborate visual display (metallurgy, murals, stone vessels) that develop along the north coast clearly argue for the regional advancement of social complexity and ideology during the Middle to Late Formative Period.

## **2.7 Final Considerations**

Throughout this chapter, I have laid the basic parameters, terminology and methodological approaches for the foregoing thesis on the Cumbemayo Canal and contemporary Cupisnique iconography. By defining the spatial and temporal frameworks for this study, I will concentrate my efforts in Chapters 4, 5 and 6 on the northern Andes (coast through highlands) during the Middle to Late Formative Periods. By engaging the methods employed in both Chavín and Moche visual studies, I frame my approach to Cupisnique iconography: 1) to highlight specific themes, both ritual (potential) and conceptual and 2) to seek out their culturally-perceived structure as it is visually, spatially and materially expressed. By applying these frameworks, I have implicitly set forth my interpretive biases, which are based on my background in these two related cultural systems. Nevertheless, I hope that the value of such models may be recognizable through their application in the following chapters on the underexplored Cupisnique culture.

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<sup>i</sup> Throughout the thesis, I adopt the term 'Classic' that was coined by Carlos Elera for the Middle Cupisnique phase style. Elera argues that the "term 'Classic' has been used because of the fluorescence that occurred in the manufacture and decoration of ceramics. The fine ceramics, found in burials and associated with ceremonial structures, are simply unequalled in the Formative Period for their high artistic quality, and the variety of representations of naturalistic, geometric, and mythical images" (1998:267). I agree with this assessment and likewise thus tip my hat to the trend in art historical study to define 'classic' periods in artistic developments.

<sup>ii</sup> Rowe originally defines the conventions as "symmetry, repetition, modular width, and the reduction of figures to a combination of straight lines, simple curves, and scrolls," and adds kennings to the following discussion (1977). Burger respects these conventions in his Chavín volume, but adds contour rivalry and anatomic design (1992).

<sup>iii</sup> Recently, Gary Urton (2008) presents a well constructed argument against the use of 'kennings' in discussing the metaphoric nature of Chavín art. While I developed my argument independently, I fully support his similar reading of the part-whole relationship in the visual system.

<sup>iv</sup> Rowe posits that "it should ultimately be possible to write a kind of grammar of Chavín art which would provide a complete explanation of the conventions and kennings of even the most complex of later designs." (1977:317)

<sup>v</sup> Similar to Gell (1998), I maintain a strict definition of 'index' as a physical art object, based on the archaeological record.

<sup>vi</sup> I draw this term from Earle (1997; see also DeMarrais, Castillo and Earle 1996).

<sup>vii</sup> As I discuss in Chapter 5, this metaphoric play between visual elements has already been suggested and used by Alana Cordy-Collins (1992a), Elera (1998), and Alva (2008). Since I appropriate this type of metaphoric visual analysis, it is important to explain why such connections may be interpreted based on the current iconography.

<sup>viii</sup> Since there is current debate over the relationship between a Gallinazo and Virú culture, the latter which maintains a distinct negative-painting fineware tradition within the Virú Valley, I provide here both terms.



## CHAPTER 3:

### GEOGRAPHY, ENVIRONMENT AND SUBSISTENCE

#### **Introduction**

The environment and local ecology play a critical role in social development, from the establishment of modes of subsistence to cosmological views. In Part II of this thesis, I address issues of landscape, architecture, visual culture, and ideology, which features depend for their tenable interpretation on these basic components of geography and ecology. This chapter thus forms a critical complement to, and extension of, the preceding Chapter 2 on methodology. I establish here the basic features of particular identified environmental and ecological conditions in the ancient Andes of Peru and their presumed importance to the Formative Period cultures.

While I introduce briefly a general view of Andean geography, the focus of this chapter is on current scholarship of the environment and significant ecological conditions of the northern Andean regions. This overview largely addresses factors that affect human settlement and subsistence patterns. These include expanding studies on plant and animal domestication during the Formative Period. It also concerns cultural ecology theories regarding settlement movements, subsistence changes, ritual and ideological adaptations to changing environmental conditions and stresses.

Certain theories have gained considerable traction over the past fifty years of research. In particular, I focus on the regional exploitation of cold-water marine resources, the adoption of llama domestication and active maize consumption, and the increased demands on interregional trade. I further examine the significance of El Niño/Southern Oscillation (ENSO) on Formative Period cultural centers. Although the data remains limited and indirect, it nevertheless indicates that critical changes in the

environment and regional subsistence occurred over the course of the Formative Period (2500-250 BCE). Alongside cultural and social factors, these changes may have played significant role in the development of social practices, rituals, iconographic and ideological systems, which are the fundamental components in addressed in Part II towards a definition of north coast Cupisnique culture.

### **3.1 Geography of the Andes**

The Andean mountains extend through six modern-day countries of South America, from Venezuela to Argentina. The mountain range, which occurs on the extreme western side of the South American continent (Map 1), is formed by the subduction of the oceanic Nasca plate under the continental South American plate. The continued movement of these tectonic plates causes earthquakes along this ridge and continues to push the Andean mountains ever higher. Along with global warming and cooling trends, the highland lift means that the current environmental conditions in the Andes – high-altitude tree line and river flow capacity and direction – have changed over the centuries. Along with climatic shifts, the current environmental conditions thus do not perfectly reflect those in the past, requiring any scholar of the prehistoric Andes to address research of ancient environmental conditions.

The Andes divide the South American continent into largely three zones – coast, highlands, and tropics. It is for this reason that I utilize the term Andean Coast, Andean highlands, and Andean forest in discussing the major east-west regional divides in ancient Peru. Given the altitude of the Andean mountains, the climate patterns from the Pacific and Atlantic are contained to the west and east of this highland zone. The rains from the opposing weather patterns generally develop and release over the mountains. The resultant runoff combines with local springs and melting highland snows to produce rivers, which flow east toward the Amazon basin or west toward the Pacific Ocean. This

east/west division of river runoff essentially marks the Continental Divide within the Andes. In Chapter 4, I address the significance of this continental divide in the northern highlands. In this thesis, however, I largely concentrate on the western flank of the Andean mountain range and the river valleys that extend down into the desert coast.

The west coast of South America is defined by a long, narrow stretch of desert littoral that extends north-south between the Pacific shoreline and Andean mountains (Map 1). The desert environment results from the cold Humboldt Current that runs north along the coastline. The cold ocean temperature, coupled with the rain shadow effect normally prevents rain from occurring at low elevations. The dry western coast thus depends on water from melting highland ice, lagoons, springs, and rains that run down from the upper elevations. These various tributaries eventually combine to carve out river valleys into the desert toward the Pacific Ocean.

In general, the Peruvian Andean Mountains are higher and dryer to the south, and they become lower and wetter toward the north. As mentioned in Chapter 2, I focus this thesis on the northern half of Peru. This area corresponds roughly to the regions between 12° and 6° South latitude, which pertains to the central, north-central, and northern regions of Peru. Based on changing geography and short-term climate patterns, the environmental conditions present in the Formative Period (2200-50 BCE) may have varied both within this temporal bracket and in contrast to modern conditions. Nevertheless, the local conditions appear consistent enough after 3000 BCE to posit observations and analyses about the observable environmental zones.

### **3.2 Environmental Zones**

In the 1960s, Javier Pulgar Vidal came to define eight environmental zones for the Andean regions and labeled them with relevant Quechua terms (1972). Since I deal

largely with environmental conditions on the coast and highlands of northern Peru, I confine this study to the pertinent altitudinal zones within these regions (Table 3.1).

<b>Environmental Zones of the Andes</b>	
<i>Chala</i> [Coast]	0-250 masl
<i>Yunga</i> [Temple]	250-2500 masl
<i>Quechua</i>	2500-3500 masl
<i>Jalca</i> [ <i>Suni</i> ]	3500-4100 masl
<i>Puna</i> [ <i>Páramo</i> ]	4100-5000 masl

Table 3.1

Within these zonal headings, I delineate the environmental conditions, local ecology, and available modes of subsistence.

### 3.2.1 Coast (*chala*; 0-250m) and *lomas* (250-800 masl):

The dry coastal littoral extends from the Pacific shoreline to the western flanks of the Andean mountains and from southern Chile to northern Peru. The narrow desert may range up to 100 kilometers wide and includes at least three broad ecological zones. These include the desert shoreline, the river valleys, and the *lomas*, or fog vegetation zones.

The western shoreline of Peru benefits from a nutrient-rich upwelling within the cold-water Humboldt Current. This current runs north from Chile to the coastline around Paita, Peru; it boasts low salinity and supports a vast marine ecology. The cold water ecology includes over 250 fish and shellfish species. The most abundant species include bonito (*Sarda chilensis*), anchovies (*Engraulis ringens*), sharks (*Mustelus* sp.) and rays

(*Myliobatis* sp.). Local shellfish include mussels (*Choromytilus* sp.), clams (*Protothaca thaca*), scallops (*Argopecten purpuratus*), limpets (*Fissurella* sp.), and crabs (*Platyanthus orbingii*). The local mammals and birds that feed on such marine life consist of sea lions (*Otaria* sp.), ospreys (*Pandion halieatus*) and cormorants (*Phalacrocorax* sp.), among others. Such cold water zones are more productive at a distance from the lower river mouth, which provides a contrasting freshwater and estuarine ecological zone. Formative Period settlements such as Las Haldas and Puémape were located strategically to benefit from these cold water productive zones (S. Pozorski and T. Pozorski 2006) (Map 2).

The lower valleys are generally defined as the regions where the river breaks out from the constrictive mountainous zones and the alluvial fan broadens toward the shoreline. Since the desert coast receives less than 100mm annual rainfall, these river valleys provide essential water for crop production. The freshwater rivers and estuaries may support catfish, or *life* (*Trichomycterus* sp.), and schools of freshwater shrimp (*Cryphiops caementarius*). Indigenous animals in these regions may range from snakes (*Boa constrictor ortonii*) and lizards to desert foxes (*Lycalopex sechurae*). Plants along the river banks may include cane (*Gynerium sagittatum*) and algarroba (*Prosopis chilensis*). Along with local fruit trees, such vegetation benefits from the high water table in this lower coastal region. The freshwater, alluvial soils and high water table make this zone apt for agriculture via floodwater farming, sunken fields or canals (Denevan 2001). The local ecology further provides resources, which certainly made these zones attractive for coastal settlements.

The *lomas*, or fog vegetation zones, appear on the western flanks of coastal hills and mountains. Ranging from 250-800 masl, these zones benefit from thick fog banks that come to rest over the western coastline during the austral winter season. The fog, or *gárua*, provides sufficient humidity to support substantial shrubs and grasses, as well as cacti – San Pedro (*Trichocereus pachanoi*) and Gigantón (*Cereus macrostibas*). Such shrub vegetation may provide grazing zones for wild animals such as white-tail deer

(*Odocoileus virginianus*) that venture down toward the coast. The cacti may support large quantities of land snails (*Scutalus* sp.), which may be easily collected for consumption from the earliest occupations (Bourget 1990; Galvez Mora, Castaneda Murga and Becerra Urteaga 1990). In northern Peru, the *lomas* zones are dispersed but with rather consistent vegetation (Dillon, Nakazawa, and Leiva Gonzalés 2008). During ENSO events, the scattered *lomas* expand considerably, combining with the temporary fertile production of the desert valleys and coastline.

### 3.2.2 Yunga or Temple (250-2500masl):

The *yunga* zone pertains largely to the middle and upper valley zones. Annual rainfall on the western Andes is considerably lower than at the same elevations on the east; however, the western *yunga* (temple) zones benefit from rich deposits of alluvium soils and river runoff from the highlands. The middle-Jequetepeque Valley, for example, boasts a thick vegetation of cacti such as Gigantón (*Cereus macrostibas*) and San Pedro (*Trichocereus pachanoi*) (Elera 1993). Where such runoff gathers as fertile upland oases or small lakes, Elera (1993; 1998) argues that species of felines, boas, and raptorial birds may congregate at these *jagüieys*, amidst the flourishing cacti. Currently, however, the ecological information derives largely from personal and local observation.

Where the sloping tributaries can easily be diverted, managed and maintained, the *yunga* elevations become productive zones for irrigation agriculture. Prehispanic crops may have included avocado (*Persea americana*), cotton (*Gossypium barbadense*), manioc (*Manihot esculenta*), squash (*Cucurbitae*), peanut (*Arachis hypogaea*), and chili peppers (*Capsicum* sp.). The coca leaf shrub (*Erythroxylum coca*), a plant with beneficial alkaloids, also grows well at these altitudes.

In certain regions, such as the middle to upper Zaña Valley, a sub-tropical forest environment persists in the western *yunga* zones. Such conditions may have been more

prevalent in the western Andean regions during the Formative Period (Alva 1986). These zones may have hosted more diverse fauna, as pumas (*Felis concolor*), jaguars (*Felis onca*), spectacled bears (*Tremarctos ornatus*), monkeys, and parrots (*Psittacidae* sp.). Such species are common to tropical forest zones to the north and east of the Peruvian Andes. The presence of these species in the Formative Period archaeological record (Chapter 5) may thus suggest: 1) preceding greater sub-tropical conditions, 2) the influx of tropical climatic events, and/or 3) interregional trade.

### 3.2.3 *Quechua* (2500-3500masl):

The *quechua* zone pertains largely to the highland slopes and valleys below the tree line, where there is considerable rains and runoff from highland springs, snows, and lagoons. In the northern Andes, rainfall at this altitude is often sufficient for agriculture. For example, the eastern Andean basins at Chavín de Huántar (north-central highlands) and Cajamarca (north highlands) boast more than 800mm annual rainfall (Burger 1992). Although these highland zones may suffer from thin soils depleted through erosion, the conditions are usually sufficient for the production of maize (*Zea mays*), quinoa (*Chenopodium* sp.), beans (*Phaseolus* sp.), and potatoes (*Solanum* sp.), among many other cultivated plants. Along with the available freshwater and trees, the *quechua* zones serve as convenient locations for agricultural settlements, which may further access the higher ecological zones – *jalca* plains and *puna* grasslands. Monumental centers such as Kuntur Wasi, Pacopampa, and Chavín de Huántar benefitted from such localization.

### 3.2.4 *Jalca* (3500-4100masl) and *Puna* (4100-5000masl):

The *jalca* zone occurs above the current tree line, with the cold, dry weather supporting largely low-lying shrubs and gramineous plants. These cold highland

expanses are not highly conducive to agriculture; however, plants such as quinoa, *oca* and *ulluco* can be grown in these regions. The *jalca* and *puna* zones often host a variety of wild cervid and camelid species, including the *taruca* (Peruvian *huemul*; *Hippocamelus antisensis*), vicuña (*Vicugna vicugna*) and guanaco (*Lama guanicoe*). Such high altitude pasturelands thus provide for game hunting, as well as herding of domesticated llamas (*Lama glama*) and alpacas (*Vicugna pacos*) (see below). Formative Period monumental centers are rarely located at these upper elevations. The Cumbemayo Canal and associated sites, however, were located in this upper *jalca* zone near the modern Cajamarca city basin (Chapter 4), taking advantage of natural springs and highland corridors.

### 3.3 Trade and Exchange

The steep rise in the Andes slopes makes accessible multiple altitudinal zones within a relatively short distance. Since the resources available or sustainable at these elevations and ecological zones vary, Andean populations have confronted dietary or resource deficiencies, as well as exotic material acquisition, by linking these productive regions in different socio-economic formats. Three formats highlighted in Andean scholarship include compressed zonation and interregional trade.

As mentioned above, individual families or settlements could exploit multiple elevation zones. For example, a family could hunt or herd llamas in the upper *puna* grasslands, cultivate *oca* and *ulluco* in the *jalca* zones, and grow maize, beans and potatoes in the lower *quechua* elevations. When Andean populations utilize multiple environmental zones, this is known generally as compressed zonation (Burger 1992). In the archaeological record, the exploitation of multiple elevations may be assessed through recovered floral and faunal remains, as well as site location access to multiple zones.



The concept of verticality generally involves a more socially-complex form of zonal integration. According to John Murra (1956), core highland centers align with satellite sites in regional elevation zones, which provide the core with self-sufficiency in varied resource production and crop selection. The identification of verticality as a presumably uniquely Andean socio-economic system, however, may be not readily visible in the archaeological record, for example in contrast to basic trade or regional exchange (van Buren 1996). Therefore, this model does not serve for Formative Period studies. Rather, the most empirical data produced through excavated cultural centers is interregional trade in comestible and luxury items.

Scholars of the Formative Period have documented interregional trade largely through the distribution of luxury materials. For example, Burger and Glascock (2000) identify the source of Formative Period obsidian at Quispisisa in the central highlands. Such obsidian was apparently distributed to the north beginning in the Preceramic Period. Within the central highlands, Burger and Matos Mendieta recognize the site of Atalla as a monumental center built around the distribution of “vermillion pigment produced at the massive cinnabar deposits 15 km to the west...”, as well as possible control over the Quispisisa obsidian source (2002: 172). They posit that this Late Formative Period site benefitted from such trade – though not direct cultural affiliation – with monumental sites to the north, such as Chavín de Huántar.

The arguably most valued trade items during the Formative Period are the marine shells *Strombus* and *Spondylus*, which were imported into Peru from north off the coast of modern Ecuador (Paulsen 1974, Pillsbury 2001, VanValkenburgh n.d.) (Map 1). Complete and worked shells have been recovered from Caral, La Galgada, Kuntur Wasi, Chavín de Huántar, and the Peruvian north coast (Map 2), spanning Early to Late Formative Period contexts. These shells serve as the most conspicuous evidence of contact with the tropical regions north into Ecuador, which likely also contributed the common stirrup spout bottle form to north coast Peruvian practice at this time. Such trade

in luxury items undoubtedly brought with it exchange of cultivars and comestible items. Since significant changes in such subsistence patterns occurred during the Formative Period, it is worth addressing these here in relation to the various ecological zones.

### **3.4 Modes of Subsistence**

The four basic modes of subsistence include fishing, hunting and gathering, pastoral herding (animal domestication), and agriculture (plant domestication). Under these categories, those of greatest import to anthropological interpretations of social change during the Formative Period of northern Peru are 1) adaptations to cold-water and warm-water fishing, 2) the development of irrigation agriculture (including maize production), and 3) the domestication of llama and alpaca. During the Formative Period, the subsistence practices of llama domestication and maize agriculture – which would become crucial to succeeding Andean cultures – were gradually adopted and disseminated throughout the highlands and coast. These practices are critical to understand, as scholars have posited their role in shaping interregional trade, ritual practices, and social ideology within these regions. I thus address the research on these two subsistence modes in greater detail below.

#### **3.4.1 Marine Fishing**

The cold-water Humboldt Current was established on the coast of Peru from at least 5800 cal yr BP (Sandweiss et al. 1999). This date corresponds with the start of the Late Preceramic Period, in which monumental architecture first appears in Peru (Richardson and Sandweiss 2008; Sandweiss et al. 2001). Based on this archaeological correspondence – between large deposits of cold-water marine species and monumental coastal architecture – Michael Moseley proposed the *Maritime Foundations of Andean*

*Civilization* (MFAC) (1975). The MFAC states that Andean civilization developed through exploitation of extensive cold-water marine resources, prior to the advancement of irrigation agriculture or the incorporation of ceramic technology. Moseley based the MFAC on the Late Preceramic monumental sites such as Aspero in the Supe Valley, which arose along the coastal shoreline and evinced abundant shell and fish consumption.

The fishing industry during the Late Preceramic, however, clearly benefitted from the agricultural production of cotton for nets, bottle gourds for net floats, and totora reeds for boats. Recently, the excavation of the monumental center at Caral in the Supe Valley (20 km inland from Aspero) has revealed an extensive Late Preceramic center with agricultural plant remains ranging from fruit trees to squash and beans (Shady 2006). The MFAC has thus undergone revision since its initial theoretical impact to address such mixed subsistence and economic factors (Moseley 1992). Nevertheless, the role of the productive marine environment cannot be understated as a resource for large-scale coastal settlements. Abundant fish and shellfish remains at numerous Formative Period coastal centers – shoreline and inland – attest to the predominant use, trade, and importation of marine fauna (Pozorski 1979, Shady 2006). The inland valley sites exchanged and complemented marine food with agricultural production.

### 3.4.2 Agriculture

For the Formative Period, the three most significant indicators of early Andean agriculture include 1) recovered plant remains, 2) locations and size of site centers, and 3) irrigation canal construction. The archaeological recovery of plants provides undoubtedly the most conclusive data. This includes research surrounding the domestication of maize, given its symbolic role and ritual function in later Andean societies. Before addressing such data, however, it is worth elaborating briefly on the latter two significant indicators.

The location and size of site centers on a general level may suggest trends in agricultural production. For example, large-scale monuments may be based within or overlooking agricultural lands; and their size may suggest the amassing of considerable labor resources. The massive centers of Caral (Supe Valley, Central coast) and Sechín Alto (Casma Valley, North-Central Coast) were constructed in the central river valleys, to take advantage of the surrounding agricultural lands. Despite these generalities, however, the parameters of individual valleys and occupational history may be complex and varied. A more specific discussion of settlement pattern and site construction within particular valleys is beyond the scope of this thesis and, for the north coast Cupisnique, demands further field research.

Regarding canal construction, there is currently no direct evidence of irrigation canals that date to the Formative Period (2500-50 BCE) within the northern coast or highlands. This situation is largely due to continued reoccupation of the agricultural plains through modern times, thus erasing earlier canals and fields. Tom Dillehay, Herbert Eling and Jack Rossen (2005), however, have recently identified ancient canals in the middle Zaña Valley, which they date as early as 6500 BP and correlate with early cultigens and Preceramic domestic centers. They suggest that the focus by archaeologists on the coastal plains has overlooked the role of early irrigation channels in the middle and upper valley zones. Their investigation thus extends the range and scope of research in ancient Andean irrigation developments.

In a more indirect fashion, Thomas Pozorski posits that the Caballo Muerto site was situated to control an early irrigation channel, which existence he surmises based on the current local topography around the archaeological complex (1976b). Clearly irrigation technology was in full development by the Middle Formative Period. By 1000 BCE, subterranean stone-lined canals appear in monumental highland centers at Kuntur Wasi (Onuki 1995), Pacopampa (Rosas and Shady 1970; Seki et al 2006), Huacaloma and Layzón (Terada and Onuki 1985), La Granja (Wester et al 2000), Huaricoto (Burger

1985), and Chavín de Huántar (Lumbreras et al 1976), extending from this early canal technology and perhaps highlighting the symbolic, ritual and political role of monumental water management (Chapter 4).

Maize Cultivation: Early plant domestication probably began as early as 8000 BCE in the Andes. As noted above, cotton (*Gossypium barbadense*) was crucial to Late Preceramic societies along the coast, providing fishing nets, clothing, hats, and woven bags. Domesticated bottle gourds (*Lagenaria* sp.) further provided floats for nets. By the Formative Period, the range of domesticated plants came to include yuca (*Manihot esculenta*), achira (*Canna edulis*), chili pepper (*Capsicum* sp.), squash (*Cucurbitae* sp.), beans (*Phaseolus* sp.), potato (*Solanum* sp.), peanuts (*Arachis hypogaea*) and maize (*Zea mays*), among others. Given the central role of maize in later Andean societies (as well as other New World cultures), scholars have devoted considerable attention to its domestication and expanding dietary importance.

The role of maize in the Andes was first addressed by Robert Bird through the 1970s and 1980s, based on its recovery from sites including the Cupisnique occupations at Huaca Prieta (Chicama Valley). Following a brief survey of these documented cases, Bird proposes that domesticated maize was established in the northern highlands by 3000 BCE. He suggests that maize entered into regular cultivation on the coast after 850 BCE, or after a tsunami demolished many Middle Formative Period coastal centers (1987). In this way, R. Bird projects for further research the hypothesis that coastal maize cultivation corresponded to the spread of Chavín civilization following a coastal collapse.

According to recent research, however, maize agriculture does not appear to have been a critical component of Chavín culture. In the 1980s, Burger and van der Merwe examined the importance of maize at Chavín de Huántar and Huaricoto in the north-central highlands, based on carbon isotope analysis of C4 plants (1990). They conclude

that maize “apparently did not play a catalytic role in the development of civilization in the Peruvian highlands, nor was it the staple of the fully developed Chavín civilization” (ibid.: 91). In other words, maize comprised a relatively steady but not significant (20%) part of the dietary intake in this region through the Formative Period.

In a 2006 article, Tykot, van der Merwe, and Burger cite the results of an expanded study, which included sites in the north highlands and central coast. They perform a carbon isotope analysis of osteological and organic (hair) remains from Pacopampa (El Mirador; north highlands), Cardal (lower Lurin Valley), and Mina Perdida (lower Lurin Valley). For the highland site of Pacopampa, the investigators once again conclude that maize was yet “of secondary importance in highland subsistence.” (2006: 187) Despite the location of Pacopampa – in the northern highlands and *quechua* zone ideal for maize consumption – the authors posit that the dietary percentage of maize during the Middle Formative was only twenty-five percent (25%), slightly above that consumed at Chavín de Huántar (ibid.). They contrast this consumption with a high rate, and earlier date, of maize in the diet to the north in Ecuador.

For the coast, the authors rely on hair samples from Mina Perdida for carbon isotope analysis. They cross-compare C4 levels with N15, which isotopes differentiate proteins deriving from greater marine fauna (N15) versus maize. The investigators posit that near the coast “marine foods were dietary staples, although maize consumption increased during the first millennium BC.” (ibid.: 187). Therefore, they conclude once again that maize steadily increased in dietary importance during the Formative Period through the coast and highlands. Nevertheless, it did not yet become the dietary staple that it would be for later Andean societies.

In a contemporary comparative study, Yuji Seki and Minoru Yoneda analyzed carbon isotopes from the north highland sites of Kuntur Wasi, Huacaloma, Loma Redonda, and Kolguitín (2006). Seki and Yoneda examined and compared C4 and N15 dietary content to determine the presence and importance of maize consumption in

comparison to marine resources. Based on thirty-five samples from the highland sites, which occupations span 1500-50 BCE, the investigators note the relative absence of maize in the diet prior to the Kuntur Wasi Phase (800-500 BCE). At Kuntur Wasi, maize enters the diet during this Late Formative Period, alongside imported marine resources. Maize consumption increases steadily through the Copa and Sotera Phases, or 500-50 BCE. In contrast, for the Cajamarca highland basin sites, only C3 plants appear in the analysis, which early samples correspond only to Early and Late Huacaloma Periods, or 1500-500 BCE. For the later EL and Layzón phases (500-50 BCE), the authors examine changes in ceramic forms to argue for the adoption of wholesale maize consumption.

Based on their identified correspondence between subsistence and material changes, Seki and Yoneda postulate (though do not describe) social, ritual, and ideological shifts that likely accompanied a socio-economic transition to large-scale maize consumption and llama domestication (ibid.: 129-130). As I address below, such subsistence changes undoubtedly impacted the social network and economic frameworks of these interactive societies. Nevertheless, the slow, uneven, and less-than-wholesale adoption of maize and llama domestication throughout the Formative Period would support the view that such elements – which became fundamental to later Andean societies – did not play a critical role in the ideology of the north coast Classic Cupisnique, their predecessors, neighbors and contemporaries. But they may have greatly impacted the Late Cupisnique transitions and practices into the Early Intermediate Period.

### 3.4.3 Llama Domestication

In the prehistoric Andes, a few animal species were actively domesticated. These include the guinea pig (*Cavia* sp.), dog (*Canis* sp.), and two camelid species – the llama (*Lama glama*) and alpaca (*Lama pacos*). The llama (*Lama glama*) was raised for service as pack animals, meat source, and wool for textiles. The smaller alpaca also provides

wool of finer quality for textile production. The camelids and guinea pig both have wild ancestors whose primary habitat includes the upper *jalca* and *puna* grasslands. Camelid species were likely first domesticated in the high southern Andean zones of Peru by around 6000 BP (Wheeler 2000). The incorporation of domesticated camelids into subsistence systems appears to have spread rather slowly northward through the Andean highlands and introduced into the coast through the Formative Period, over 2000 years.

The establishment of domesticated llamas as a subsistence practice likely began to impact social and economic systems in various ways. As Miller and Burger point out (1998), llama domestication locally may encourage greater integration of settlement populations, between the upper grassland zones and lower agricultural zones. This stable interchange of resources between regions may permit increased specialization within the integrated societies, where less time expended on hunting or gathering allows for more skilled and diversified craftsmanship. The role of llamas as pack animals further may have allowed greater ease in interregional trade. Although New World camelids do not provide for human transport, llamas can carry up to sixty kilograms (60kg) of materials, or one-third their weight. The domestication of llama, once completely adopted, may thus correlate with changes in trade, social status, and settlement hierarchy.

Although current data remains insufficient to discern a clear pattern of llama domestication across the highlands and coast, faunal studies at various monumental centers evince a progressive transition away from deer hunting through the Formative Period. In the highlands, camelid herding came to replace deer hunting as a primary meat source at Chavín de Huántar, Huacaloma, Layzón, and Kuntur Wasi. At the Early Formative site of Kotosh (Central Highlands), deer (white-tail and *huemul*) comprised up to seventy percent (70%) of the dietary meats (Izumi and Sono 1963).<sup>i</sup> At Huacaloma and Layzón in the Cajamarca basin, Melody Shimada notes the shift from cervid remains during the Early Huacaloma Phase (1500-1000 BCE) to camelids by the Layzón Phase (250-50 BCE) (1985). Through the subsequent Cajamarca phases, llama domestication



stays relatively consistent (ibid.). In contrast, at the site of Kuntur Wasi, Uzawa is progressively analyzing nearly 10,000 faunal remains, from which he postulates that cervids and camelids comprise at least eighty percent (80%) of the total meat consumed (2009). Of this total artiodactyls consumption, Uzawa posits that camelids progressively increase from zero to fifty percent (50%) by the Sotera Phase (250-50 BCE). In other words, deer hunting maintains predominance through the Kuntur Wasi and Copa Phases (800-250 BCE), decreasing only to fifty percent (50%) by the final site occupation. Llama domestication never completely replaces deer hunting at Kuntur Wasi.

These subsistence shifts in the north highlands contrast with Chavín de Huántar in the north-central Andes. Through his site research, Burger invited Gordon Miller to examine the faunal remains from the excavations. Miller and Burger (1995, 1998) propose that llamas comprised seventy percent (70%) of the faunal remains by the early Urubarriu Phase (Middle Formative Period) around the monumental center. By the Janabarriu Phase (Late Formative Period), llama remains composed upwards ninety-three (93%) of local meat consumption. The authors conclude that “caza disminuyo en importancia hasta que alrededor de la fase Janabarriu su contribución a la dieta cotidiana fue casi nula” (1998: 293). They thus propose that hunting of deer and wild camelids was completely replaced by the domestication of camelids by 300 BCE. The authors surmise that the subsistence changes affected socio-economic features of Chavín settlement, permitting status differentiation between high pastoralists and valley agriculturalists, or between small highland settlements and the monumental center. They base this assessment on the distribution of llama remains, with choice body parts of young camelids occurring in the lower communities and not the upper settlements (1995, 1998).

Along the Peruvian coast, a few sites have evinced the presence of camelids, as domesticates or ritual animals. The earliest documented case of llamas is at Huaca Negra in the Virú Valley. At the aptly named Temple of the Llamas in Huaca Negra, Strong and Evans recovered from buried pits on the temple summit four complete llamas, which had

their legs tied and harnesses at the neck (1952). The four llama deposits date to the Middle Guañape Phase, or Middle Formative Period. To the north of Virú, llamas appear to have been steady dietary component at the Caballo Muerto Complex in the Moche Valley (Pozorski 1979). At Huaca Herederos Chica, Shelia Pozorski calculates the total percentage of camelid remains at fifteen percent (15%), versus seventeen percent (17%) for cervid remains during the Initial Period (1400-1000 BCE) site occupation. Following this period, she argues that “the continuous presence of these animals suggests that, unlike deer, camelids persisted as a meat source throughout the duration of the Caballo Muerto occupation (ibid.: 428).

For the sites of Puémape (Jequetepeque Valley) and Huaca Lucia-Chólope (Lambayeque Valley) further to the north, camelid domestication – rather than *ch’arki* importation – is presumed for the Middle Formative Period (1200-900 BCE) based on the recovery of both faunal and coprolite remains (Elera 1998; Shimada, Elera and Shimada 1982).<sup>ii</sup> As Shimada and his colleagues suggest (1982), the presence of camelid coprolites at Huaca Lucia-Chólope supports the herding of coastal llamas rather than periodic importation of dried and preserved llama meat from the highlands. It appears that camelid domestication, like maize consumption, increased steadily along the coast and the highlands during the Formative Period, while yet not replacing deer hunting and fishing.

### **3.5 Climatic Phenomena and Environmental Stresses**

The dramatic range of environmental zones makes available an equally dramatic range of environmental stresses and conditions that may affect social development. Archaeology in the Andes has taken into consideration a number of important geographic and ecological factors in the rise – and fall – of cultural groups. While few scholars have ventured overt ecological determinist theories, certain environmental phenomena have

received considerable attention since the 1970s as affecting human settlement and adaptations in ancient Andean cultures.

Regarding ailments and disease, the climatic and resource conditions in the Andes may cause problems such as altitude sickness, dietary deficiencies (goiters, anemia, and scurvy), and auditory exostoses. Altitude sickness could be ameliorated through the cultivation and consumption of coca leaves (*Erythroxylum coca*) while the vitamin deficiencies could be moderated through trade in salt, fruit crops, marine and terrestrial species. Chronic conditions such as auditory exostoses may also have been recognized ailments during the Formative Period, especially when resulting in hearing loss. As discussed below, this condition pertains largely to the coast, due to the cold water exposure. Since Cupisnique scholars have placed significance on this pathological feature as a marker of social status, I discuss it further below.

The significant environmental threats to prehistoric Andean populations consist of earthquakes, tsunamis, heavy rains, water inundation or sand encroachment. Many such examples have been documented in historic times, and the latter threats have been readily linked with Mega ENSO events. In the past forty years, at least three strong ENSO events (1972, 1983-1984, 1998) have caused intense flooding, disease, and devastation to the north coast of Peru. They have also provided significant information for the study of ENSO climatic, ecological and social impact. Over the past forty years, scholars in Andean studies have placed particular emphasis on identifying Mega El Niño events in the archaeological record. For the Formative Period, they emphasize the role of such events as drivers of social change, cultural collapse, and ideological adaptation. Since I refer to such environmental conditions in Part II, it is necessary to introduce the basic components of El Niño, as well as the current scholarly theories, following a study of auditory exostoses.

### 3.5.1 Auditory Exostoses:

The strong ocean winds and cold water pose a particular threat to coastal fishermen. Since Junius Bird's research at Huaca Prieta in the Chicama Valley during the 1940s, scholars such as Ian Tattersall (Bird, Hyslop, and Skinner 1985), Yoshio Onuki (1995), and Carlos Elera (1998) have highlighted the presence of auditory exostoses in prehistoric coastal populations. Exostoses occur as the build-up of bone within the external auditory meatus (outer ear canal). These osseous growths can eventually block the ear canal, leading to ear infections or hearing loss. Such exostoses appear to develop as a protective measure against repeated exposure to cold water over the ear. As a result, auditory exostoses are common in modern-day surfers, and thus are commonly referred to as 'Surfer's Ear.' Direct exposure to cold water is the most evident cause of exostoses; however, this exposure may take place through activities placed both above and below the water surface. Given the need for perpetual exposure, most such osseous formations develop in adults over the age of thirty.

In osteological remains, exostoses are easily visible within the external auditory canal. During the 1940s, Junius Bird excavated at Huaca Prieta, along the shoreline of the Chicama Valley. In the resultant publication (Bird, Hyslop and Skinner 1985), Ian Tattersall provides a brief analysis of the exostoses present in thirty-eight Preceramic (9/27; 33%) and ceramic (4/11; 36%) burials recovered from the site. Tattersall notes that Dr. Charles Lester was the first to recognize the significant presence of exostoses in prehistoric Andean populations in the mid-1960s. Tattersall then details the osteological findings, noting the variation of slight, moderate, and severe exostoses concentrated largely in the aged (40+ yrs) adult males. Through his analysis, Tattersall cites a regularity of exostoses in the coastal population at Huaca Prieta. He avoids, however, direct interpretation of such pathology by noting two key variables. These include 1) the greater percentage of auditory exostoses in males than females and 2) an unclear increased correlation to below versus above water activities. For example, Junius Bird

had noted that the deep-sea mussels common in the site midden were likely collected by skilled divers at considerable depth. Tattersall concludes, however, that the evidence is not sufficient to suggest that the males at Huaca Prieta were exclusively the fishermen and that their activities must include, or were restricted to, underwater diving.

At the site of Kuntur Wasi in the northern highlands, Onuki (1995) has noted the presence of auditory exostoses in the cranium of an aged (60+ yr old), high-status male who occupied Tomb 2 on the platform summit. Onuki posits that this osseous feature on the Tomb 2 occupant “sugiere su origen costero” (ibid.: 212); that is, it indicates that he lived for an extended period of time along the coast. The burial in Tomb 2 is the most central and elaborate boot-shaped chamber excavated from within the monumental site. Pertaining to the Kuntur Wasi Phase (800-500 BCE), the tomb is considered to be contemporary with an increase in architectural construction, corresponding to an influx of coastal Cupisnique ceramics and iconography (also Onuki 1997). The elite individual in Tomb 2, with his auditory exostoses, would thus suggest his involvement in a possible highland migration during the Late Cupisnique period, rather than (or in addition to?) Cupisnique influence arriving through increased trade up the Jequetepeque Valley. In apparent conflict with this interpretation, an associated tomb – Tomb 3 – was dated to around 1000 BCE (Onuki 1995). Given this early date in relation to their presumed association with the Kuntur Wasi occupational phase, the archaeologists further suggest that the poor osteological remains may have resulted from their secondary burial and not primary occupancy of the monumental highland site center (ibid.: 212).

Extending from such researches, Carlos Elera (1998) ventures a more symbolic and social significance to the auditory exostoses. Elera postulates that exostoses in elite Cupisnique burials suggest the development of social status attributed to skilled coastal divers. Elera notes that the tropical marine shells *Strombus* and *Spondylus* are ubiquitous in Cupisnique iconography and archaeological contexts, including three complete shells in Tomb 2 at Kuntur Wasi (Onuki 1997). These gastropod and bivalve species must be

collected by skilled divers from five to thirty meters (5-30m) deep in the tropical ocean off coastal Ecuador. Elera posits that Cupisnique divers may have acquired status by diving locally for cold-water marine mussels, as well as in tropical waters off Ecuador for the symbolic tropical marine shells (*ibid.*; 277). Elera supports this theory for Cupisnique culture by analogy with marine divers in the later north coast Chimú state system (900-1460 CE). The sample Elera uses, however, is limited to 1) an Early Formative Period burial from Huaca Prieta and 2) a Late Formative Period tomb at Kuntur Wasi. Neither case corresponds to Classic Cupisnique culture, thereby leaving a direct correspondence to acquired social status open to continued research.

Nevertheless, the examples make clear a growing interest in paleo-pathological studies for interpreting social practice, ritual and status among ancient Andean cultures (Cordy-Collins and Merbs 2008). Clearly, certain environmental conditions may structure social practice through benefit and cost, writing themselves into the material as well as natural realms. The most dramatic of such cases in the western Andes derives from the El Niño/Southern Oscillation (ENSO) that flushes in along the coastline once a decade.

### 3.5.2 El Niño in the Formative Period

The west coast of Peru is affected greatly by conditions of the eastern Pacific. Under normal conditions, the cold Humboldt Current runs from south to north along the west coast of South America. This cold current supports an abundance of marine life, which in modern times has made Peru one of the leading fishing industries and producers of fishmeal in the world. Approximately once a decade (3-7 years), the warm tropical current from the eastern Pacific pushes further south, replacing the northern areas of the cold Humboldt Current. The warm water phase of this Southern Oscillation (ENSO) is known today as 'El Niño' for its appearance around December, a temporal association with the Christ child (Philander 1990). The strength of the warm tropical current varies,

with Mega El Niño events occurring every 30-40 years and completely replacing the Humboldt Current as far as the Peruvian south coast. Such warm waters bring with them humidity and rains, transforming the desert coast into fertile land of vegetation (Dillon, Nakazawa, and Leiva Gonzales 2003). The rains, however, also can produce devastating floods, erosion, and structural damage.

This dual role – production and destruction – further is manifest in the local ecology of the northern coasts. During an ENSO event, the abundant cold water species and their predators die off in considerable numbers along the coastline. In contrast, the land species – insects and animals – flourish due to the expansive vegetation. Rodents multiply, along with their snake, fox, and avian predators (Bourget 2006); flies multiply alongside their dragonfly and spider predators (Polis et al. 1997). For coastal populations, the conditions thus provide increased resources, but they also bring destruction to infrastructure and increased disease to crops and humans (ex. *Leishmaniasis*).

The El Niño (ENSO) is undoubtedly a critical climatic phenomenon in the Andean region. As a result, it has received considerable attention in scholarship of modern and prehistoric adaptations. For the modern fishing industries, studies have focused on effects of the recent events of 1973, 1983-1984, and 1998. In the late 1970s through 1990s, Quinn and his colleagues (Quinn et al. 1987) reviewed Spanish documents to publish the first historical record of ENSO events spanning more than 450 years. Recently, the charting of ENSO events has been extended into prehistoric times based on studies of ice core compositions from local Andean (Quelccaya) and distant Greenland sources, tree ring analysis, lake levels, and marine species populations (Thompson et al. 1985). By comparing these data sets, the analyses have addressed the evolution of El Niño events on the Andean coast (Richardson and Sandweiss 2008).

In archaeological research, the effects of environmental change on the Peruvian coast first came into consideration by Lanning and Moseley at Ancón, as well as Mary Parsons (1970), who first took under scrutiny El Niño as a factor in cultural adaptations.

By the 1980s, El Niño had become central in archaeological theories regarding culture collapse (Burger 1988). Research on the Quelccaya ice caps provides a register of pre-historic climatic changes; however, the broad time range and considerable geographic distance only permits information on a general scale (Thompson et al 1985). The most popular archaeological evidence for El Niño events thus remain changes in dietary marine resources, evident destruction by rains or high waters, and heavy sand encroachment. The latter has largely been addressed by Moseley and his colleagues (2008) in relation to Early Intermediate Period Moche occupations along the north coast.

For the Formative Period, there have been two main, and interrelated, arguments regarding the role of El Niño in large-scale cultural adaptations. The first outlines the dramatic increase in El Niño frequency along the Peruvian coast from the Middle Preceramic through Middle Formative Periods (5800-3200 BP). The second posits the demise of coastal populations based on a theorized Mega El Niño event around 800 BCE. The arguments are both interrelated and relevant to Cupisnique culture studies.

ENSO Periodicity: Expanding on their research since the 1980s, Richardson and Sandweiss (2008) draw on archaeological data at Early Preceramic through Formative Period coastal sites to posit trends in El Niño presence and periodicity. First of all, they argue that Peruvian coastline north of 12° S latitude was considerably warmer and more humid than the southern coastal regions for nearly three thousand years, from 8800-5800 BCE. They base this theory on 1) the warm-water marine species faunal remains from Middle Preceramic settlements, 2) the poor preservation of organic remains (humid soils), 3) the similar species distribution across northern lomas zones, and 4) the “greater soil development and the lack of salt deposits in the north” (ibid.: 65). Although they support that ENSO events likely began around 13000 BP, Sandweiss and Richardson contend that El Niño was practically non-existent during the subsequent three thousand year period of the Middle Preceramic. They argue that this broadly charted periodicity of



ENSO events, based on faunal types identified at excavated coastal settlements, are supported by other lines of research, such as lake level analyses and coral records.

By 5800 cal yr BP, the investigators suggest that El Niño reinitiated along the north coast; however, it occurred with limited frequency of 50-100 years, or once every three to four generations. During this time, the north coast climate cooled along with the influence of the Humboldt Current. Cold-water mollusk species in the refuse at Late Preceramic and Early Formative Period sites support this general shift in resources. The authors note the rise in monumental architecture along the coast following this cold-water shift at the start of the Late Preceramic. As I mentioned above, this recognized correspondence was the basis for Moseley's influential theory the *Maritime Foundations of Andean Civilization* (MFAC), in which social complexity in the Andes increased through the unique dynamics of this cold-water ecology.

Richardson and Sandweiss (2008) conclude by positing that the current decadal rate of El Niño events was established around 3200 cal yr BP. In other words, El Niño events came to have the modern decadal regularity starting around 1200 BCE. This date notably marks the general start of the Middle Formative Period (1200-900 BCE) and Classic Cupisnique culture on the north coast. Toward the conclusion of their analysis, however, the investigators adjust the 3200 cal yr BP date to 3000 cal yr BP. This subtle date change permits to correlate this "major climatic transition" with "the abandonment of Initial Period temple centers shortly after 3000 cal yr BP" (ibid.: 66). In other words, they postulate that the dramatic increase in El Niño periodicity led to the collapse of Initial Period coastal population centers. As such, they align with the theory regarding the collapse of coastal monuments and the rise of the Chavín horizon due to a Mega El Niño event sometime around 800 BCE.

Mega-El Niño Event: As with the auditory exostoses, the detailed archaeological research at Huaca Prieta in the 1940s prompted another critical theory in north coast Formative Period studies. During his research in the Chicama Valley, Junius Bird noted the considerable damage to structures and burials within the Preceramic and ceramic areas of the site. Arguing against the role of heavy rains, J. Bird presumed that a large tidal wave had struck the Chicama Valley during Cupisnique times. He supported this theory based on beach gravel and cobbles deposited over site sectors, and similar stratigraphic layers in a river bed (Bird, Hyslop and Skinner 1985).

In 1987, Robert Bird elaborated on this research to argue for an immense tsunami that struck the coast sometime between 900-850 BCE, around the presumed rise of Chavín culture and adoption of maize agriculture. Countering the research by Nials, Moseley and colleagues (1979), in which they argue for a Mega ENSO event around 500 BCE, Bird argues for a singular tsunami of considerable height and breadth over three centuries earlier. He correlates data from three monumental coastal centers – Garagay (Central Coast), Las Haldas (North-central coast) and Huaca Prieta (North Coast) – regarding evidence of water damage, silt overlay, and dates of temporary or permanent site abandonment soon after 900 BCE, or around 850 BCE.

Despite Robert Bird's conviction regarding a tsunami, other scholars promoted more the role of a Mega ENSO event based on such increasing research and interest in the phenomenon. In contrast to Robert Bird (1987), for example, Matsuzawa argues for the temporary abandonment of Las Haldas due to "sudden torrential rainfall" (1978: 672). In similar manner, Burger postulates that a climatic ENSO event may have instigated the collapse of coastal centers and spread of a Chavín 'crisis cult,' which he dates originally to 500 BCE (1988) and later leaves more open to adjusting scientific research alongside social factors (1993; also Van Buren 2001).

As mentioned in Chapter 1, research during the 1970s and 1980s provided increased climate and environmental studies, as well as domestic remains and critical

radiocarbon dates. The latter confirmed the precedence of Initial Period coastal centers to that of Chavín de Huántar, which site Burger dates to 900-200 BCE (1984, 1998). Based on such corresponding research interests, the theory of coastal ‘collapse’ due to a Mega ENSO event continues as a prominent explanation for a perceived dramatic Formative Period culture change, which includes a cited ‘collapse’ of the north coast Cupisnique.

Through his excavations at Puémape (lower Jequetepeque Valley) in 1989-1990, Elera noted heavy water damage to the Middle Formative (1000-500 BCE) sectors of the site. He compares such damage to that identified at Huaca Prieta by Junius Bird and dated by Robert Bird to 850 BCE. Elera further highlights the shift from cold-water to warm-water marine species consumption, between Early Formative (1500-1000 BCE) and Salinar (400-100 BCE) site occupations (1998; also Elera et al. 1992). While Elera largely appears to support the role of a Mega ENSO event at 800 BCE, he leaves open the possibility of a tsunami (*ibid.*).

In addition to the 800 BCE Mega El Niño date and subsequent Cupisnique migrations upland, Thomas and Sheila Pozorski (2005) argue for a significant ENSO event in the north-central coast Casma Valley around 1400 BCE. In 1980-1985, a joint PUCP-German project excavated at the Early Formative Period site of Cerro Sechín in the Casma Valley. Through their excavations, the project members found a mud layer overlaying the first posterior occupation of the site. The mud was filled with footprints of all sizes, and its thickness and distribution suggested a strong rain event that overtook the local inhabitants. Through his detailed radiocarbon stratigraphy at the site, Fuchs (1997) dates this event to just after 1300 BCE.

Thomas and Shelia Pozorski have since compared this event with similar rain destruction recovered from their excavations at Huaca A at Pampa de las Llamas-Moxeke and Las Haldas (2005). Based on their comparative radiocarbon dates and research, they posit this event at 1400 BCE.<sup>iii</sup> The authors argue that such Mega El Niño event, alongside political strife in the Casma Valley, resulted in the consolidation of power at

the immense valley-center site of Sechín Alto. According to the investigators, Sechín Alto maintained such valley-wide control from 1400-1000 BCE, with the presence of Las Haldas-style ceramics evincing a new social connection between these two extensive valley and coastal sites. This polity may have lasted through the presumed sudden abandonment of Las Haldas around 890 BCE (Matsuzawa 1978, Grieder 1978). During this period of shared ceramic style, neither monumental site witnessed construction on a large scale, associating their monumental prestige to before 1400 BCE, and largely concluded by 850 BCE. Nevertheless, these centers – including Cerro Sechín – remained occupied through the Late Formative (900-250 BCE), during which they likely maintained importance.

By identifying a mega ENSO event at 1400 BCE, Thomas and Shelia Pozorski – perhaps inadvertently – allude to the ability of the monumental north-central coast sites to adapt to social pressures alongside major climatic events as cultural movers. In other words, the populations at Las Haldas, Sechín Alto, and Cerro Sechín utilized the monumental centers for at least another 500+ years, and occupied the sites through the Late Formative Period. Fuchs posits, in fact, the final reoccupation of Cerro Sechín ending around 200 BCE, and due largely to a new socio-political system in the Casma Valley centered on Pallka and the complexes of San Diego, Pampa Rosario, and La Cantina (1997: 159). In other words, neither the 1400 BCE nor 800 BCE Mega ENSO events collapsed the coastal polity, but rather they may -or may not- have shifted regional authority – that is, the focus of monumental architecture and resources.

In a similar fashion, Burger notes that the central coast site of Manchay Bajo adapted to the threat of repeat El Niño events through the construction and continuous refurbishment of a dam against landslides (2003). He argues that “the continuity and duration of Manchay culture for a millennium are a clear demonstration of the resilience and flexibility of its social forms in the face of mega-El Niño’s and other disasters that must have occurred.” (ibid.: 105). These cases thus advise for primary consideration of

adaptive social changes, resource management, and ideological developments in comparison to catastrophic prehistoric Mega El Niño events when addressing changes to monumental structures and local occupancy.

### **3.6 Final Considerations**

The challenge of scholarship on Formative Period Peru remains the need for more extensive archaeological data and research. In order to approach anthropological or visual interpretation in the most comprehensive manner, investigators must be broadly inclusive in their methodological scope, addressing regional ecology, environmental research, bio-archaeology studies, and other cross-disciplinary information. The above issues represent those factors currently considered the most pertinent to interpretive analyses of Cupisnique culture and ideology.

In Part II of this thesis, I extend from the points presented above to address their expression in Cupisnique architecture and visual culture. In Chapter 4, I examine the symbolic role of canal construction and water management, thereby extending from the development of irrigation technology during the Formative Period. In Chapter 5, I analyze how Cupisnique iconography expresses the role of local and non-local ecology, and evinces interregional trade. I thus identify various animal and plant species, their ecological placement and possible significance. The foundation of such analysis in Part II thus relies on the above extra-disciplinary aspects for a comprehensive reading of the archaeological and visual record.

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<sup>i</sup> White-tail deer live from 1000-4000masl, whereas *huemul* (*taruca*) occupy elevations 2500-5000 masl.

<sup>ii</sup> *Ch'arki* is dried llama meat, produced for easy storage and transport. It is created over five days, by drying and freezing the meat in the upper grassland elevations, where the cold and dry conditions do not introduce rotting or bug infestation. Miller and Burger defend their interpretation of this process application in the Formative Period based on ethnographic comparison and such critical conditions (2000).

<sup>iii</sup> In a previous contribution (2003), Thomas and Shelia Pozorski support a 1200 BCE date for the alluvial event at Cerro Sechín (Fuchs 1997), and correlate it with Huaca A at Pampa de las Llamas-Moxeke. The focus of this successive article, however, was on prehistoric Chimú irrigation systems during the Late Intermediate Period. The date of 1400 BCE was seemingly inspired by radiocarbon dates recovered for the Moxeke occupations at Sechín Alto, which dates they present in this subsequent publication (2005).

## CHAPTER 4:

### CUMBEMAYO CANAL: DESIGN AND CULTURAL CONTEXT

#### **Introduction**

The Cumbemayo Canal is an open-air stone-lined channel located in the northern Andes of Peru, to the immediate south-east of the modern-day city of Cajamarca (Map 3-4). The ancient archaeological site was re-discovered in historic times by Julio C. Tello in 1937 and given the name '*kumbe mayo*,' meaning 'fine river' in indigenous Quechua and associated with the local river source.<sup>i</sup> Since Tello first cleared the archaeological site, he and scholars since him have associated the canal construction as early in the regional history, around the Middle to Late Formative Period (1000-50 BCE). Although the evidence for use of the stone-lined canal remains limited by a lack of material for radiocarbon dating and its reutilization through time, local and regional archaeological research have come to provide substantial data to frame contextual and interpretive analyses of this monumental stone channel.

Since the research by Tello, there have been a limited set of published investigations performed on the Cumbemayo Canal. Research in and around Cajamarca over the past thirty years, however, has evinced that the north highlands of Peru participated in a broad Formative Period sphere of interaction, which included Cupisnique or Chavín cultural influences. The Cumbemayo Canal is recognized as a product of this early regional influence since Tello worked there in the late 1930s (2004). Given its intricate design and associated petroglyphs, I came to approach the archaeological site as an exciting interdisciplinary project – incorporating archaeological, visual and materials analyses – which would engage the problematic of Formative Period culture in the north highlands.

The north highlands of Peru have been addressed in relation to a broad Formative Period cultural expansion since the earliest research in the region (Carrion-Cachot 1948; Reichlin and Reichlin 1947; Roe 1974; Tello 2004; Willey 1951). The more direct associations with a coastal Cupisnique versus highland Chavín culture, however, have not been fully clarified or differentiated in the region. Archaeological excavations around Cajamarca have provided data – such as stirrup spout bottles, polychrome mural fragments, and visual motifs on ceramics – to support a connection to the north coast Cupisnique (Seki 1993, Terada and Onuki 1985). Furthermore, nearby regional centers like Kuntur Wasi and Pacopampa have been identified as participating in a Late Cupisnique or Chavín style horizon (Burger 1993; Onuki 1995; Seki and Yoneda 2005). These centers also substantially interacted with the Cajamarca basin sites from the Early to Late Formative Periods (1800-200 BCE). The Cumbemayo Canal, its intricate design and petroglyphs, thus offers symbolic entry into the examination of Formative Period regional development.

In this chapter, I pursue a comprehensive study of the Cumbemayo Canal. After a brief description of the archaeological feature and its geographic location, I review the history of published research on the monumental channel. This includes the topographic maps and archaeological research performed on the site, as well as the modern reconstruction of the aqueduct and its current role as a tourist center. Having established the background information, I present results of my fieldwork project at the canal in the Fall 2007. Although the fieldwork met with a number of obstacles, it nevertheless provided considerable access to the archaeological site, experience in fieldwork direction, and intensive study of the local and regional archaeology. Through such research, I posit a relatively comprehensive analysis of the canal features, design components, and cultural context. I conclude that the origin of the Cumbemayo Canal pertains to the Late Huacaloma Period (1000-550 BCE) or Middle to Late Formative Period – concurrent with a Cupisnique influence in the Cajamarca basin. I thus conclude by examining the larger role of water management in Formative Period monumental architecture.



## 4.1 The Cumbemayo Canal

The Cumbemayo Canal is located nearly eight (8) kilometers to the south-west of the modern-day city of Cajamarca in the Department of Cajamarca, Peru. It appears on Map 15F (Cajamarca) of the national topographic maps. According to the datum WGS 1984 UTM Zone 18-S, the archaeological site begins at the coordinates 9204700 North/767200 East at the canal intake (*bocatoma*) (Fig. 4.1). It extends eastward across nearly eight kilometers of varying terrain and progresses down over eight hundred meters in elevation (3565-2700 masl) to arrive at the Cajamarca basin. Based on its extensive length and unique design, the geographic setting and site layout within the landscape are critical to interpreting the site intent.

### 4.1.1 Site Location

This Cumbemayo Canal is located in a narrow highland ravine, or *quebrada*, which hosts a natural river of the same name (Fig. 4.2). The Cumbemayo River derives its water source from the westernmost and narrowest section of the quebrada, known by Tello as ‘Totorobamba,’ where perennial springs and streams from highland lagoons wind around fallen boulders to feed together into a river source (Fig. 4.3). As the Marañón Archaeological Expedition first noted in 1937 (2004), the rocky conditions of this sector kept it devoid of cultural remains. The archaeological portion of the site rather begins in a sector that Tello terms ‘Secsemayo,’ a broader portion of the Cumbemayo quebrada that runs due east between the Secsemayo and Balconcillo peaks and maintains a rather consistent elevation of 3565-3560 masl (meters above sea level) (Fig. 4.4). This high-altitude ravine terminates in rocky outcrops known locally as ‘Frailones’ for their erect forms and dark coloration (Fig. 4.5), geologic features developed during the lower Cretaceous period (Cardich 1991). At the mouth of the ravine, the largest water tributary

flows down into the river from Altuyojo (Fig. 4.6), above the left bank. By accumulating such runoff channeling into the ravine, the Cumbemayo River may expand considerably during the rainy season, or austral summer (December-May). After breaking out of the quebrada mouth (Fig. 4.7), the river eventually turns southwest to join with the Naranjo River, a tributary of the Jequetepeque River system.

With a consistent altitude of 3500-3600 masl, the base of the ravine and surrounding plain correspond to the *jalca* zone (Chapter 3), which vegetation and fauna includes thick *ichu* grasses (*Calamagrostis tarmensis*), species of low-lying cactus, and small mammals such as viscacha (*Lagidium peruanum*). Where the ravine ends and the valley breaks open, the land may support cultivation of plants such as potato, *quinoa*, *oca* and *ulluco*, as it does today for local farmers who exploit these additional uplands. The minimal resources and strong afternoon winds, however, make this region relatively unappealing for settlement. Therefore, agriculture and animal pasturing remain limited in this zone. The most significant aspect of this region rather is its role as a natural corridor to the western Jequetepeque Valley, following the river tributaries.

Toward the east, the *jalca* plain extends to the continental divide, or the point where water runoff partitions between the western Pacific and eastern Atlantic (Amazon) watershed. Around Cajamarca, the continental divide is overlooked by Cerro Cumbe (south) and Cerro Consejo (north) (Fig. 4.8). Crossing this divide, the landscape slopes down through a fertile *quechua* zone of the Cajamarca valley basin (Fig. 4.9), which rests at around 2700 masl. The *quechua* zones and valley basin boast sufficient annual rains and river runoff to support productive agriculture without extensive irrigation. According to Seki and Yoneda (2005), maize cultivation only entered this region by the Late Formative Period (Chapter 3). Given the available water resources around Cajamarca, the eastern water diversion of the Cumbemayo Canal was arguably more symbolic than utilitarian for valley-bottom agriculture. This situation argues for greater attention on the aqueduct design, cultural context, and ritual function.

#### 4.1.2 Site Description

As a continuous water channel, the Cumbemayo Canal once extended nearly eight kilometers (8 km), from its start in the high-altitude ravine to its end in the Cajamarca basin. The canal course and local topography was first registered by Julio C. Tello in 1937 (2004), and subsequently by Georg G. Peterson in 1947-1948, with the help of local engineers and topographers (1969). Through his investigations, Peterson divided the canal into three distinct portions, or *tramos*, which divisions I adopt here (Fig. 4.1). The first portion is arguably the most well known and archaeologically valuable of the three sections, pertaining to the narrow ravine in the upper altitudinal zones. The second section extends from the open mouth of the ravine east toward the continental divide. The third portion pertains to the eastern side of the continental divide and boasts the greatest change in elevation. Through this section, the channel carries water down toward the Cajamarca city basin, passing alongside hillside monumental centers.

The primary section of the Cumbemayo Canal actually begins as a rather thin, or 'fine' (*cumpi/cumbe*), channel carved into the local volcanic bedrock of the northern Andean ravine (Fig. 4.4). Measuring no more than fifty (50) cm wide by sixty-five (65) cm deep, the initial section runs up to eight-hundred and fifty (850) meters across nearly level terrain and boasts an intricate design laden with sharp zigzags (Fig. 4.5), acute angles, and sweeping curves. The canal crisscrosses the narrow *quebrada*, or ravine, at key intervals, which are regularly marked by modified caves and monoliths (Fig. 4.12). A number of elaborate petroglyphs appear on these 'sacred caves' and megaliths, as well as on the superior walls of the canal, at significant locations along its eastward course (Fig. 4.33-4.34). Along with the channel form, these carved images indicate a symbolic structuring to this early water feature, which I discuss in further detail below.

The final two thirds of the canal progress through largely earthen terrain with occasional stone lining (Fig. 4.8, 4.22). Today, the second section is largely covered by expanding grasslands and local fields. In the 1960s and 1970s, this portion of the canal, which runs along the northern flank of the *jalca* plain, was modified in order to make the canal system functional for the local populations of San Vicente (just above the city of Cajamarca). As it does today, the second portion of the canal serves to redirect the channeled water, which would normally feed into the Pacific drainage (Jequetepeque River system), across the continental divide and down into the Cajamarca city basin. The third section leads the water down nearly 1000 meters in elevation, bypassing the Formative Period monumental sites of Cerro Consejo (Fig. 4.9) at the continental ridge and Agua Tapada (Fig. 4.22), overlooking the valley floor.

Notable effort and intention was placed in the intricate design of the primary canal section, as well as the crossing the continental divide. Many researchers have noted these symbolic features of the canal system (Burger 1992; Peterson 1969; Ravines 1985; Tello 2004); however, the meaning of such design components has never been fully assessed. The published investigations at the site and my mapping project on the canal, nevertheless, provide sufficient information to pursue a cultural context and thus interpretive schema for the monumental aqueduct.

## **4.2 History of Site Research**

The Cumbemayo Canal has received interest and study since the site discovery in 1937, and now boasts as a modern tourist destination. Corresponding to a measured development of local archaeological research, investigations of the canal have advanced rather slowly, and as largely formal and documentary. In the following sections, I highlight the published research of the past seventy years, including work by Julio C. Tello (1941, 2004), Georg Peterson G. (1969, 1985), Núñez Jiménez (1986), Rogger

Ravines (1985), and Silva Vigo and Cornelia Lecca (1997) with the *Instituto Nacional de Cultura* [National Institute of Culture] (INC). Given the rather unique status of the Cumbemayo Canal, as a Formative Period monumental water channel, it has received considerable scholarly and popular attention in reports on the north highlands. Such references are not included here since they contribute minimal information to the site analysis; however, I cite the most relevant sources in the final considerations.

#### 4.2.1 Marañón Expedition: Julio C. Tello

On February 22, 1937 Ernest Puente Velezmoro, the community head of the Hacienda San Cristobal near Magdalena, discovered and explored the ruins of the ancient canal based on the observations of a local resident Luis Manza. The community leaders contacted Julio C. Tello, who traveled to the site that same year in the context of his greater Marañón Archaeological Expedition (2004). The expedition was launched by National University of San Marcos in Lima and funded by Nelson A. Rockefeller and the Institute of Andean Studies, with the intention to study cultural remains from the Casma and Santa Valleys through the northeast Andean region of Celendín. Tello and his expedition crew, which included Toribio Mejía Xesspe, visited the ‘aqueduct of Kumbemayo’ on October 9, 1937 (ibid.). Following research to the northeast at Chokta in Celendín, the team returned to the Cumbemayo Canal around mid-November, for ten days of survey, cleaning and registering the upper channel sections (Fig. 4.1).<sup>ii</sup>

Regarding a possible eastern third of the canal, Tello notes the numerous aqueducts running along the hillsides toward the Cajamarca basin, any of which may have drawn from the Cumbemayo Canal. He further suggests that an ancient reservoir cited near the College of San Ramón and already buried by local farmlands may have once functioned in conjunction with the canal (1941). Beyond these comments, Tello does not appear to have explored an eastern portion of the Cumbemayo Canal and its

relation to the Cajamarca basin. Nevertheless, Mejia Xesspe refers to the eastern diversion of the canal water source in his brief publication of the expedition work (1956: 332), which documentation notably followed on the research by Peterson in 1947-8.

Unfortunately, Tello never fully published the results of the Marañón Archaeological Expedition, including the research at the Cumbemayo Canal.<sup>iii</sup> According to Virgilio Freddy Cabanillos (2004), who edited and published the remaining expedition notes nearly seventy (70) years later, the Cumbemayo research was registered in Field Diary VI from the expedition, which was first compiled into an unfinished field report in 1945 by Jorge Croveti and Jorge Medina. The latter authors completed only three chapters of a projected seven-chapter report, having consulted Carrión-Cachot and Mejia Xesspe for revisions. The completed chapters and unrevised notes were then brought together in the 2004 volume. In addition to the text, the publication includes eighteen photos of the site, twenty-three drawings, and a basic topographic map of the canal route.

Through the two week investigation along the canal, the expedition visually recorded plans and profiles of the canal (ibid.: F4/62, F11/618-621). By clearing the thick *ichu* grasses, they first identified the prominent megaliths and caves located along the first section of the canal route. These include ‘La Tiana or Trono’ – a megalithic altar near the *toma* – and the megalithic cylindrical stone (ibid.: Fig. F11/488, F2/8a, F4/51), as well as the Sacred Caves I and II (ibid.: Fig. F4/63-64; Figs. 4.12-4.13). The latter Sacred Cave II is located around Altuyo, a rocky outcrop above the left bank of the river, and is also known as the ‘Sanctuary.’ The expedition team further registered the visible petroglyphs at these various cited locations, in addition to the complex forms along the canal walls (ibid.: F11/609, F4/32, F12/626, F4/65). For the sake of comparison to my own research, I reproduce here the two drawings at these sacred caves, as well as the complex petroglyph image (Fig. 4.14-4.16)

Tello notes the considerable erosion and erasure of the petroglyph images, as well as overlay of perhaps modern Catholic motifs. Nevertheless, he draws considerably on

the style of the petroglyph images and the megalithic stone construction to date the canal construction to the late Chavín or early ‘Marañón’ cultural period (ibid.). Through his continued research on the Chavín horizon, Tello reinforces the Chavín to Marañón cultural affiliation in successive publications (1941; 1956; 1960).<sup>iv</sup> For example, he cites a similar stratigraphic sequence from Chavín to ‘Marañón’ ceramics at the sites of Kuntur Wasi (Jequetepeque Valley) and Santa Apolonia (Cajamarca basin) (Tello 1960). According to his published notes (2004), Tello acknowledged similarities with Inca stone carving and Inca textile patterns, in the design of the ‘throne’ and a ‘*tokapu*-like’ arrangement of petroglyph images along the canal. Nevertheless, he maintains that the Cumbemayo Canal belongs firmly a late north highland Chavín horizon.

#### 4.2.2 Georg Peterson G.: Topographic Site Map

In the late 1940s, Georg Peterson G., a German engineer working in Peru, visited the Cumbemayo Canal with the intention to document the original route and functional design. In 1947, Peterson surveyed the ancient canal with Elena Hosmann, an avid photographer of highland indigenous communities. As a posthumous memorial to Hosmann, Peterson includes three of her photos from this trip in his 1969 *Tecnia* publication.<sup>v</sup> The other thirteen photos in the article were taken by Peterson and Pedro Rojas Ponce (1969). One of the photos by Peterson shows a portion of stone-lined channel once visible in the community of Agua Tapada (1969: Fig. 7). Today, the stone channel section is reportedly buried under the local school building of this highland Cajamarca community. Such photo documentation highlights the challenges faced in registering the lower reused or buried sections of the original aqueduct. The survey with Hosmann was sufficient, however, to convince Peterson of the original canal intent, to direct water over the continental divide and toward the Cajamarca basin.

Peterson then pursued a topographic mapping of the complete archaeological site and surrounding geography. For assistance, he hired local topographer J. H. Fiestas H. and engineer J. M. Cacho C. Together, they register the dimensions of the three portions as (Fig. 4.1; Table 4.1):

Three Sections of the Cumbemayo Canal	
Section I	850 meters
Section II	2600 meters
Section III	5650 meters

Table 4.1

Beyond the investigations by Tello, Peterson documents the final route of the Cumbemayo aqueduct from the Abra at the continental divide toward the Cajamarca basin. He cites the two already-buried tanks noted by Tello, as well as two large reservoirs. Peterson references the more ancient reservoir, which rests behind Santa Apolonía at 500 meters southwest of the College of San Ramón, as twenty-five by thirty (25 x 30) meters in dimension and the terminus of the canal (*ibid.*). Yet he appears to remain cautious in his identification by citing the references by Tello and another, more modern reservoir. As with Tello before him, Peterson cannot convincingly link a final reservoir with the larger Cumbemayo Canal hydraulic system.

In the *Tecnia* publication (1969), Peterson provides: 1) a revised topographic map of the total canal length [Plan I] (Fig. 4.11), 2) a detailed drawing of the first section [Plan II] (Fig. 4.17), 3) four aerial plans and two profile drawings from key points along the upper canal route, and 4) fifteen site photographs (*ibid.*: Fig. 1-15). For the sake of comparison, I reproduce the complex petroglyph image (Fig. 4.18).



Following the presentation of the data on the Cumbemayo Canal, Peterson ventures a broad discussion of Cajamarca regional history in order to frame a cultural context. Peterson argues that the petroglyph images lack the “rigid lines of the classic style of the Chavín horizon” (ibid.: 135). Nevertheless, he fundamentally agrees with Tello regarding a late Chavín or early Cajamarca cultural affiliation for the aqueduct.<sup>vi</sup> For Peterson, the Cumbemayo Canal is a construction feat associated with early irrigation. He argues that the zigzag canal portions serve to regulate water flow and, along with the very gradual decline of the canal through the first two *tramos*, to project the water over the continental divide (Fig. 4.5). As such, the canal is an impressive hydraulic system evincing the symbolic role of early water management.

#### 4.2.3 Antonio Núñez Jiménez: Petroglyph Study

From 1972 to 1979, Antonio Núñez Jiménez performed an extensive survey of seventy-two (72) petroglyph sites from Ecuador down through Chile, including the northern regions of Peru. He published the results of this petroglyph registry in 1986, including drawings and site descriptions, in a three volume set produced through the Regional Project of Cultural Patrimony and Development PNUD/UNESCO. Through his avid rock art research, Núñez Jiménez brought attention to such abundant sites, particularly in South America.

Regarding rock art in the ancient Andes, Núñez Jiménez argues that “los petroglifos chavinoides y cupisnicoides son de los más comunes en el Peru,” noting that they abound in the Jequetepeque region of Cupisnique culture (ibid: 37). He thus devotes considerable attention in Volume I to the petroglyph sites through the north coast valleys, such as the Zaña and Jequetepeque, as well as the Cumbemayo Canal. Through these sites, certain figural Chavín or Cupisnique style petroglyph images are relatively identifiable; however, they generally occur along with abstract designs or succeeding

cultural forms. For example, the Cupisnique-style feline at El Palmo in the region of Chongoyape occurs alongside abstract and geometric forms (ibid: Fig. 313). The mixture of Latin crosses, abstract designs and geometric shapes along the Cumbemayo Canal thus parallels the combination of designs at other locales while not negating the significance of identifiable Formative Period forms and styles.

For the Cumbemayo Canal, Núñez Jiménez divides into two sections the images along the canal versus those within the context of the ‘Sanctuary’ (ibid.: Sections 7 and 8). The images along the canal are not presented in any sequence or order, nor do they correspond with photographs from the site in all but two cases (ibid.: Fig. 504-505 and 514-515). Núñez Jiménez includes ten separate drawings (ibid: Fig. 501-504, 506-507, 530-533), which illustrate roughly the petroglyph groups with unmarked scale or without clear association to their placement along the canal sequence. Tello (2004) and Peterson (1969) before him had documented certain associated petroglyphs, though fewer than those registered by Núñez Jiménez. The designs not included in these early investigations leave open for debate their original inclusion along the canal. Given this problematic, I provide the documented history of the petroglyph images that I recorded digitally in the 2007 field project (Table 4.4 below).

Núñez Jiménez performed a more detailed study on the ‘Sanctuary’ (Sacred Cave II). The researchers recorded the petroglyphs carved on all rock facings, including the back wall, front border panel and floor (ibid: Figs. 512-529). These drawings readily compare with my recordings at the site center. For this thesis, I reproduce two drawings from the Sanctuary walls and the complex petroglyph for comparison (Fig. 4.19-4.20).

#### 4.2.4 Rogger Ravines: Canal Plans and Profiles

In 1985, Rogger Ravines published an inventory of archaeological research and site surveys in the Cajamarca region, building on those previously completed by Henry

and Paule Reichlin (1949; see below), by Ravines and Matos (1983), and by Daniel Julien (1988). As Ravines notes (1985), the sites around Cajamarca had as yet witnessed minimal archaeological excavation (Reichlin and Reichlin 1949; Tello 2004), of which the Japanese Expedition had produced the only complete research publications (Terada and Onuki 1982, 1985). Nevertheless, the investigations were sufficient to provide a local ceramic seriation, basic architectural patterns, and a temporal schema for regional cultural development.

Following an introduction to the history of local research, Ravines posits a cultural chronology for the Cajamarca region (*ibid.*). He blends the cultural terms generated by the Reichlins and the Japanese Expedition to propose a sequence consisting of ten consecutive periods (Period I-X; see Table 4.5 below), of which Periods I-VI pertain to the Formative Period (2200-50 BCE). In the remaining volume, Ravines documents in alphabetical order the archaeological sites surveyed around the Cajamarca region. He provides their location on the national cartographic maps, the latitude and longitude, altitude above sea level, total site area, and history of research. The majority of sites are listed with the most basic of such available information; however, Ravines includes eleven pages of text, photos, plans and profiles of the Cumbemayo Canal, derived from a survey project performed by the Instituto Nacional de Cultura (INC), Cajamarca in 1985.

The 1985 INC project focused exclusively on plans and profiles of the first two western *tramos* of the canal. The project investigators divided the 3100 meters of canal into 117 sections, which range from twenty to forty (20-40) meters in length. Given the greater design intricacy of the initial stone-lined channel, the first portion is partitioned at closer intervals (10-20 meters) while the second portion is generally registered in longer sections (30-40 meters). Ravines lists the details of each section along with drawing of the transverse profiles. The list includes information regarding material composition (volcanic rock or natural earth), the general form of the transverse cut (rectangular,

trapezoidal or natural), the base and top width of the canal profile, and a short description of any unique features (1985). The latter may include the fallen boulders along the canal route, carved monoliths or tunnel features, as well as notes regarding the eroded status of the canal form. Ravines includes twenty photos of the most noteworthy features, including the intake (*toma*), the ‘throne,’ the cylindrical megalith, the complex petroglyph design, and the sacred caves (ibid.: 76-78), citing their corresponding profile section. The INC drawings and photo records thus complement and add to the preceding topographic maps and plans executed by Tello and Peterson.

Regarding a contextual analysis of the archaeological site, Ravines maintains a rather consistent tone with the previous investigations. In the site description, he regards the Cumbemayo Canal as comprising structures and designs pertaining to the Early Horizon [Late Formative Period (900-200 BCE)] (ibid: 72). According to the broader sequence of Cajamarca occupation, Ravine places the Cumbemayo Canal within his Phase VI, along with the sites of Agua Tapada and Layzón (ibid.: 37). Ravines posits that the lower terraces on the west façade of Cerro Consejo, which overlook the continental divide, pertain to the same phase. According to Ravines, the Phase VI sites correspond to the Layzón and Initial Cajamarca periods, or to 500-50 BCE. Subsequent surveys in 2001 and 2003 by Yuji Seki around Cajamarca substantiate the temporal associations of these respective site centers.<sup>vii</sup> Based on their temporal association, Ravines presents these sites as comprising the Cumbemayo hydraulic system, perhaps extending from the recent proposal by architects Carlos Williams and Jose Pineda (1983).

The INC project appears to have not addressed the third eastern *tramo* of the canal. As such, Ravines cites the information provided by Tello and Peterson regarding the possible original trajectory of the aqueduct and its terminus in a local reservoir. He notes, however, the probable long-term pre-Hispanic use of the canal, as well as the recent modern reconstructions. By the 1970s, the Cumbemayo hydraulic system had been modified for reutilization by the local communities around Cajamarca. Unfortunately,

Ravines does not document the history of such recent construction, which information is crucial to a modern conception of the Cumbemayo Canal.

#### 4.2.5 Modern Reconstruction<sup>viii</sup>

Following the Agrarian Reform in Peru, which took place through the latter half of the twentieth century, farmers from local communities around the Cumbemayo Quebrada sought greater access to the *jalca* and upper *quechua* zones for cultivation. Local community members within the quebrada San Vicente, which overlooks Cajamarca city on the southeast side, went to the Cajamarca Corporation to request engineers to redevelop the Cumbemayo hydraulic system for productive water to the eastern side of the continental divide. By 1964, the engineer Mr. Tejada Sanchez, Engineer, began work on the reconstruction of the canal.

During the 1960s and 1970s, the second and third portions of the canal were reconstructed using large cobblestones and concrete to reinforce certain sections (Fig. 4.21). For these reconstructions, the modern canal utilized a lower elevation along the northern (left) side of the valley, where a more ancient upper channel remains evident in the landscape (Fig. 4.9). At the continental divide, the *Abra*, was redone in the early 1970s as a reinforced concrete tunnel (Fig. 4.22). Through the community of Agua Tapada, the canal was bolstered in concrete while the original stone-carved channel was reportedly buried under the local schoolhouse construction (Fig. 4.23). The modifications to the Cumbemayo hydraulic system effectively brought water into the Cajamarca basin, to the extent that communities in Magdalena to the west requested the construction of a secondary intake to redirect Cumbemayo River runoff back toward the western regions.

Such modern reutilization of the channel has also greatly obscured any remaining data regarding the original form and construction of the latter two canal portions. Yet this situation is not unique to the Cumbemayo hydraulic system. Water management features

are notoriously difficult to date or contextualize archaeologically. This is due to factors such as their material base, exposure to natural elements and erosion, and likely reuse through time.<sup>ix</sup> Stone construction, in particular, offers minimal opportunity for effective dating techniques.<sup>x</sup> The construction of a hydraulic system may thus otherwise be ascertained through archaeological research in immediate and regional association.

Seeking such information, the INC initiated field research at the Cumbemayo Canal in 1997, which excavations resulted in limited but insightful information (Vigo and Lecca 1997). As I discuss in the following section, the four-week excavations took place at the ‘Toma’ of the canal and recovered stone wall structures, lithic and ceramic remains. The following year (1998), Lic. Luis Felipe Villacorta Ostolaza submitted two follow-up proposals regarding 1) further archaeological research at the ‘Toma’ and digital mapping of the canal, as well as 2) improvements for enhancing tourism, cultural patrimony, education, and standard of living around the Cumbemayo Canal. Some of the proposals were pursued, such as improving the road to the archaeological site for tourism; however, the canal did not witness additional archaeological research following the 1997 project until my research in 2007.

#### 4.2.6 Archaeological Fieldwork Project - 1997

In 1997, the Instituto Nacional de Cultura (INC) undertook limited but significant excavations near the intake, or *bocatoma*, of the archaeological canal under the direction of archaeologists Lic. Edgardo Silva Vigo and Lic. Cesar Cornelio Lecca (Vigo and Lecca 1997). At the mouth of the ‘Totorabomba’ section of the Cumbemayo Quebrada, the landscape broadens into a small open plain of short grasses enclosed within the ravine walls (Fig. 4.2). The investigators created a metered grid across this sector, known as “La Toma,” and initiated four weeks of excavation from mid-August to mid-September. The archaeological team excavated five distinct units, which they label 1A, 2B, 3A, 3B and

4A (ibid.; see Fig. 4.50-4.51). The units range in size from one to six (1-6) meters in width and length and pertain to the south-western extreme of the canal.

Within the excavations units, the archaeologists obtained comparable stratigraphic layers, stone flakes and ceramic remains. In each unit, the sterile layer – the layer devoid of cultural materials – appeared between one to two (1.3-2) meters in depth. Above the sterile level, the investigators note a layer of compact yellow soil, which they label as a ‘floor’ (*piso*) in Units 1A, 2B and 3A. Above this layer, there was a relatively consistent stratigraphy of a layer of gray earth followed by a top layer of brown-colored soil. The units each contained carved rectangular stone blocks arranged lengthwise as if lined up to create a structure (Fig. 4.24-4.25). The blocks generally appeared around 30-50cm below the surface and rested on the yellow-colored layer (C), which space was eventually filled in by layers B containing ceramic sherds, possible stone flakes and cores. The consistency of such layers argues for a unitary construction event in the Toma sector, with such carved, aligned blocks built on the yellow floor layer. It is possible that these aligned stones once defined an architectural feature of ceremonial or ritual use.

The material recovered from the ‘Toma’ excavations evinces close affiliation with the canal. For example, the size, shape, linear alignment and local material of the carved stones closely recall those stones used in the design of the Cumbemayo Canal. One of the stone blocks within Unit 3A further exhibits a star-shaped petroglyph design (Fig. 4.26), which is etched in a similar fashion as the canal petroglyphs images. The construction of the ‘Toma’ sector thus associates with that of the canal, suggesting that the recovered stratigraphic ceramic data may provide insight into the cultural construction.

Ceramic Analysis: Through the unit excavations and clearing of the canal, the investigators recovered a limited set of eighty-two (82) ceramic fragments. The analysis of this collection was done by Bernarda Delgado Elias and was included in the original

site report (ibid.). Delgado Elias bases her ceramic identifications on the local seriation registered through the excavations at Huacaloma and Layzón (Terada and Onuki 1982, 1985). In 2006, the INC-Cajamarca kindly granted me access to this ceramic collection to photograph and draw the fragments and to evaluate the report conclusions.

According to Delgado Elias, only twenty-eight (28), or thirty-eight percent (38%), of the ceramic fragments are diagnostic pieces. The majority (43%) of non-diagnostic consists of rough brown-ware fragments (Fig. 4.27, 4.76), which Delgado identifies as pertaining to the Early Huacaloma phase (1500-1000 BCE). The second most common types (32 %) pertain to the Late Huacaloma Phase (1000-550 BCE), including clearly identifiable post-fire paint fragments (21 examples; Fig. 4.28, 4.77), as well as fine-line incised and burnished line types. Only three fragments (less than 4%) of Early Cajamarca and Middle Cajamarca kaolin-based ceramic styles were recovered from the investigations, with five (5) sherds remaining unidentifiable (Table 4.2).

<b>Ceramic Analysis from <i>Toma</i>, 1997</b>			
<b>Period</b>	<b>Diagnostic</b>	<b>Un-Diagnostic</b>	<b>Total</b>
Early Huac.	9	26	35
Late Huac.	12	14	26
Huacaloma	1	12	13
Early Caja	1	-	1
Middle Caja	2	-	2
Unclassified	3	2	5
<b>Total</b>	<b>28</b>	<b>54</b>	<b>82</b>

Table 4.2



Through my review of the analysis, I found two of the Late Huacaloma ceramic identifications contestable. Furthermore, I remain hesitant to identify the rough and smooth brown ware fragments as exclusively Early Huacaloma styles. According to the excavations at Huacaloma and Layzón, such brown ware ceramics continued in regular use through the Formative Periods (Terada and Onuki 1982, 1985). Nevertheless, I agree with the overall assessments provided by Delgado Elias, based on the limited but identifiable sample of Late Huacaloma and Cajamarca sherds.

In her conclusions, Delgado Elias posits that the majority of ceramics pertain to the Early and Late Huacaloma Phases. She associates such phases with dates of 1800 BCE and 1000 BCE respectively; however, I would presume a date range of 1200-800 BCE to cover both within the Middle Formative Period. Delgado Elias further notes that the recovered Huacaloma fragments largely pertain to stratigraphic layers of excavation, from Units 1A, 2B and 3B. The Late Huacaloma style post-fire painted ceramics were the most numerous (21) and derive largely from Layer B of the respective Units 1A and 2B. This situation contrasts with the three Cajamarca fragments, which were recovered from the clearing of the canal. Together with the large stone blocks, the ceramic data supports a Formative Period construction of the 'Toma' sector, dating to the Late Huacaloma Phase (1000-550 BCE).

Conservation: The final component of the 1997 archaeological project was to initiate conservation efforts on the canal and its associated petroglyphs. The conservators worked to register the images largely through photographs the visible petroglyph designs along the canal, caves and monoliths. They used distilled water to clean the stone facades of lichens and sand accumulations, followed by a compress of acid free paper soaked in distilled water to extract any salinization of the rock. The conservators concluded their efforts by applying a diluted layer of paraloid, a chemical adhesive comprised of acetone, to the stone surface of the petroglyph images.

Since these documented conservation efforts, the INC-Cajamarca has reportedly maintained a biannual cleaning of the canal and the petroglyph designs. The opening of the Cumbemayo Canal as a tourist site in 1997, however, has prompted an increase in site erosion and defacing of the canal through graffiti (Fig. 4.30). These aspects pose continued concerns for conservation efforts on the ancient canal sector.

#### 4.2.7 Modern Tourism and Cultural Considerations

The Cumbemayo Canal was officially transformed into a tourist site in 1997, for which a local site museum and stone pathway were constructed. The museum is a two-room building with photo displays of the local geography, regional ecology, and historic information regarding the site research. It also has display cases exhibiting ceramics of the local archaeological sequence, as well as a general three-dimensional topographic model of the canal and surrounding quebrada. Along with the site museum, stone pathways were constructed for tourist walkways through the site. The first staircase leads to the outcropping containing the ‘Sanctuary’ (Sacred Cave II). In 2003, a stone wall was added to block entrance into the ‘Sanctuary’, which serves as the first stop on the tour. Tours of the archaeological canal today run from 9:00am-1:00pm roundtrip from the main plaza in Cajamarca.<sup>xi</sup>

The INC-Cajamarca began registering the tourist visits at the archaeological site in 2002, which data they kindly provided me through 2005. Over these four years (2002-2005), the number of visitors increased at a steady pace. Nevertheless, they represent only half as many tourists as those that visit the *Cuarto de Rescate*, the room in the center of Cajamarca city where Inca Atahualpa was presumably held ransom by the Spanish (INC 2006; Table 4.3). According to local registries, the majority of the tourists are Peruvian, with regional schools embarking on field trips to the highland sites. A small

percentage of foreign tourists enter the Cumbemayo Canal, which visits are heavily advertised by various guide companies around the city.

<b>Tourism Records in Cajamarca 2002-2005</b>		
<b>Year</b>	<b>Cuarto de Rescate</b>	<b>Cumbemayo Canal</b>
2002	43,913	26,056
2003	46,524	25,375
2004	48,414	24,737
2005	51,208	30,150

Table 4.3

The INC-Cajamarca monitors and protects the tourist site. They also maintain close collaboration with the highland families that live around and guard the archaeological center. During my research at the highland site, I had the pleasure to work closely with Sebastian Villanueva Bacón and Julio Villanueva Bacón, who supervise the region.

#### 4.2.8 Final Considerations

The publications discussed above present the most in-depth analyses of the Cumbemayo Canal as an archaeological site. Beyond such investigations, the canal has been noted in a number of field notes, regional surveys, and local tourism reports. Peterson cites early references to the site made by P. Alberto Gridillo (1939), H. Villanueva Urteaga (1939, 1942, 1944, 1947), H. Horkheimer (1944), L. Alva (1946), P.F. Cortazar (1967), and W. Eagle (1946) through their individual visits to the Cajamarca region between 1937 and 1969. The references tend to be minimal notations

regarding the archaeological site; for example, the citation by Horkheimer comprises just one page and two photos in his *Vistas Arqueológicas del Noroeste del Peru* (1944: 44).

Since Peterson surveyed the channel, local and regional interest in the Cumbemayo Canal has multiplied such references, scientific and non-scientific studies of the hydraulic system. These include reports regarding the cultural importance and regional interest in the canal, as well as its inclusion in regional archaeological studies (Seki 2001, 2003; Williams and Pineda 1983). The latter investigations I discuss below in regard to the cultural context of the canal.

#### **4.3 Project Cumbemayo Canal 2007**

During the summer of 2006, I resided in Cajamarca, Peru, pursuing research on the Cumbemayo Canal and visiting local sites with archaeologists from the Instituto Nacional de Cultura - Cajamarca (INC). Since the Cumbemayo Canal had been open to tourism in 1997, the INC-Cajamarca was increasingly monitoring its status and condition, as well as promoting its research. Through discussions with them, I posited the need for an updated comprehensive study of the canal, including a digitalized map of the site and local topography. In 2003, the INC had initiated a digital mapping of the archaeological canal, in order to document as well the tourist route and walkways (Fig. 4.31). Given the concerns by the local populations over government imposition on their land, the mapping project was performed rapidly in one day and with a general schema of the site. A more detailed digital map of the site was a necessary next step in the site registration.

The following summer 2007, I was invited to collaborate on a project to map digitally the archaeological canal structure. I traveled to Lima, Peru in August 2007 and submitted the project to the national INC-Lima. Government regulations and delays for the permit, however, resulted in a reduced scope and non-invasive (no excavation) framework for the final 2007 Cumbemayo Canal Project.

#### 4.3.1 Fieldwork

In mid-October 2007, I co-directed a fieldwork mapping project at the Cumbemayo Canal through gracious funding by a University Continuing Fellowship from the University of Texas at Austin and support by the Instituto Nacional de Cultura (INC) of Peru. The final project was to register digitally the archaeological sector, *Tramo 1*, of the Cumbemayo Canal and to provide the most comprehensive digital record of its associated features – petroglyph designs, canal structures, rock-cut tunnels, flanking megaliths and modified caves.

The digital mapping project was completed through the use of a Leika TCR407 Total Station and ArcGIS software imaging technology. We began in the Toma sector, establishing the readings through the use of a Garmin ETrex Legend Global Positioning System portable device. We established the site mapping under the datum WGS 1984 UTM Zone 18S (Universal Transverse Mercator System). Given the remote location and limited satellite coverage at the site, the coordinates were established with a minimum error range of eleven (11) meters. The remainder of the canal was registered under this datum and coding the various features of the system.

With the help of the local resident Sebastian Villanueva Bacon, we identified and registered the canal features according to their material and design. This included the evidence of stone-lined carving (into the bedrock), stone construction (built of small stones), and modern modifications (concrete) of the canal (ex. Fig. 4.5, Maps 4.32-4.51). Where these identifiable construction techniques were not present, the canal runs through rather soft terrain. For these sectors, we recorded the ancient canal as ‘not evident,’ to register its current state. Based on drawings by Tello at the canal (2004), it appears that more extensions of the canal once boasted stone lining, which may have been taken from the site for reuse by later or modern inhabitants of the region. The earthen sectors,

through their regular and bi-annual cleaning are rather amorphous in shape, and thus they present a challenge to register with confidence. Nevertheless, the archaeological canal follows a consistent path through the quebrada (Fig. 4.32-4.51).

In addition to registering the canal – its construction material, dimensions, and direction, – we further recorded certain principle features along the canal. These include most directly the tunnel-like formations, where the fallen boulders forced the initial builders to carve out space underneath the rocks for water passage. We also recorded the ‘Throne,’ the megalithic cylindrical stone, and the sacred caves. At the Toma, the units excavated by the INC in 1997 were still visible in the topography, including the large aligned stone blocks. Therefore, we registered these units and their stone features into the digital map. By also recording the datum point that the excavators had established in concrete at the site, I was able to adjust the excavated units in the drawings according to their original documented dimensions in the fieldwork (Fig. 4.56-4.75). Finally, included in the digital maps are the corresponding locations of the major visible petroglyph groups along the canal walls and cave structures (Fig 4.33-4.34), augmenting the record provided the earlier hand-drawn maps by Tello (2004) and published format by Peterson (1969).

The petroglyph designs were registered through the use of digital photography, in particular a Nikon D70S camera and remote flash. I photographed the designs in the afternoon, given the heavy shadows cast during the morning and late afternoon hours. When necessary, I used a remote spotlight flash to augment visible shading along the designs and stone facings. I then enhanced these photo records through the use of Adobe Photoshop software, to adjust the clarity and contrast.

The scale drawings of the images were produced through a multi-step process. I began by creating detailed scale drawings in the field. Given the rough and eroded rock facing for many of the petroglyph groups, I chose grid drawing over the use of field rubbings. The digital drawings were produced by correlating the photographs with the scanned in hand drawings. These digital scaled drawings then were once again compared

with observations and measurements taken in the field for details. Such verification of the designs and scale was necessary given the unclear nature of certain groves in the stone facings. Although it remains difficult even by sight to ascertain the intentionally carved versus naturally eroded surface in a rock face, the reproductions of these images produced here reflect the greatest attempt toward discrimination and accuracy.

#### 4.3.2 Results

From the data collected during fieldwork, I produced digital maps of the first archaeological sector of the canal (Fig. 4.32-4.51). These include detailed records of the various canal components. The digitally registered petroglyph images are further reproduced, along with updated digital plans of the Sacred Caves I, II (Fig. 4.52-4.55). These compare with projects conducted previously on the Cumbemayo Canal (Table 4.4)

<b>Cumbemayo Canal Petroglyph Registration</b>										
<b>Researcher</b>	<b>Toma</b>	<b>Gp 1</b>	<b>Gp 2</b>	<b>Gp 3</b>	<b>Gp 4</b>	<b>Gp 5</b>	<b>Gp 6</b>	<b>CP</b>	<b>SC I</b>	<b>SC II</b>
	(N)	(N)	(S)	(S)	(N)	(N)	(N)	(N)	(N)	(N)
Tello	PH	-	-	-	DR	DR	-	DR	PH, DR	PH, DR
Peterson	PH	-	-	-	PH	PH	-	PH	PH	PH
Núñez J.	-	DR	-	-	DR	-	-	DR	-	DR
Ravines	PH	-	-	-	-	-	-	PH	PH	PH
Jones	PH, DR	PH, DR	PH, DR	PH, DR	PH, DR	PH, DR	PH, DR	PH, DR	PH, DR	PH, DR

Table 4.4

[PH = Photograph, DR = Drawing, (N) = north side, (S) = south side]

The comparison of these records forces consideration of the original presence of the various petroglyph designs along the canal walls. For example, Tello presents Groups 4 and 5 along the northern side of the quebrada in a small drawing reconstruction. The drawing does not appear to venture complete accuracy in its rendition. Nevertheless, the step design, which are today found to the left of the horizontal almond-shaped element (Fig. 4.64-4.65), do not appear in his early drawings. As the chart evinces, however, the preceding researchers did not record many of the currently visible petroglyphs. This situation makes unclear the original presence of these various images. Given this situation, I pursue interpretation of those groups registered by each investigator: the throne, the complex petroglyph, and the Sacred Caves I and II. In these locales, certain designs repeat – such as a multi-part step design or zigzag pattern (Fig. 4.56-4.57, Fig. 4.70-4.75), which I discuss below for its relationship to the canal design and construction.

The complex petroglyph provided the most compelling visual data for the early investigations to date the canal. While the design is abstract (figure facing down?), the style and recognizable components suggest its Middle to Late Formative Period date. These evidences are supported by numerous comparative material and visual examples in local and regional archaeological centers. Therefore, I introduce this contextual archaeological data prior to advancing interpretation of the canal construction design and visual features that were documented under the Project Canal Cumbemayo 2007.

#### **4.4 Archaeological Context**

Archaeological research around Cajamarca has gradually increased since the 1930s, when Tello first visited the region under the Marañón Archaeological Expedition. The most notable and relevant studies within the Cajamarca basin include those by Henry and Paule Reichlin in the late 1940s (Reichlin and Reichlin 1947), the Japanese



Expedition to Nuclear American in the 1970s and 1980s (Terada and Onuki 1982, 1985), and regional surveys (Julien 1988; Seki and Tejada 2001, 2003). More broadly, the archaeological investigations around the north highlands – at the sites of Kuntur Wasi (Onuki 1995, 1998), Pacopampa (Rosas and Shady 1970; Morales 1980; Seki et al 2005, 2006), La Granja (Wester et al 2001), La Esperanza (Narvaez Vargas 2001) – and research by Núñez Jiménez (1986) and Pimentel (1986) have provided additional context and data regarding the developments around Cajamarca. After describing the results of some of these investigations, I will compare such information with that posited above in order to venture interpretation of the Cumbemayo Canal system.

#### 4.4.1 Henry and Paule Reichlin:

From September 1947 to April 1948, Henry and Paule Reichlin performed eight months of site surveys and strategic excavations around the Cajamarca region. Their research was guided under the auspices of the French Ethnographic Mission to Peru, through the Museum of Man in Paris. The extent of their research remains largely unpublished, excepting notes produced in French for a brief article and later reproduced in Spanish for a compiled volume on Cajamarca history (1949; 1985). The published notes provide, nevertheless, the first ceramic sequence for the Cajamarca region.

Through their investigations, the Reichlins surveyed over ninety (90) archaeological sites, which they divide into seven geographic sections. For each site, they intended to prepare a catalog listing the site name, geographic location, plans and photographs, and identified superficial material remains (ceramics, lithics). The Cumbemayo Quebrada was listed under Section B as Site 26 (1949). In the published article, they follow this site listing with a discussion of the common architectural constructions and funerary patterns, as well as the establishment of a ceramic sequence through selective stratigraphic excavations.

In order to establish a cultural sequence, the investigators followed months of site surveys with four months of selective excavations. They focused on the sites of Santa Apolonía, Hacienda Las Torrecitas, Cerro La Vaquería, Cerro Wayrapongo, and Cerro Chondorko (Map 3). The latter site – Chondorko – proved the most productive of such units, with a clear imposition of occupational layers from a ‘Chavín’ period through a Cajamarca cursive style (Cajamarca III). Based on these excavations, the Reichlins posit a regional ceramic seriation, to which they apply a new nomenclature (Table 4.5).

<b>Cajamarca Comparative Ceramic Sequences</b>	
<b>Reichlins (1949)</b>	<b>Matsumoto (1993)</b>
Torrecitas-Chavín	[see Table 4.6]/ Initial Cajamarca
Cajamarca I [Marañón]	Middle Cajamarca
Cajamarca II	
Cajamarca III (Cursive)	Late Cajamarca
Cajamarca IV(Tiwanaku)	
Cajamarca V (Inca)	Final Cajamarca

Table 4.5

The Reichlins thus replace the broadly inclusive term ‘Marañón’ used by Tello with a more specific sequence of ‘Cajamarca’ ceramic styles. They label these stylistic developments Cajamarca I-V and provide brief descriptions as to form, composition, painting, and visual motifs. They argue that this ceramic sequence develops continuously from the end of a Chavín ‘Torrecitas’ style through the intrusion of a Tiwanaku (Cajamarca IV) and eventually Inca ceramics (Cajamarca V).

The most notable contrast between the early 'Torrecitas-Chavín' style and the subsequent 'Cajamarca I-V' ceramics is the use of kaolin. The early Formative Period wares are rough brown or tan clay fired brown or black with areas of polish, post-fire paint, or fine and broad-line incisions. In contrast, the Cajamarca styles are generally composed of local, fine light-colored kaolin clay sources. The paint applied may range from orange, red, brown, to black. The decorations of the Formative Period often appear on cylindrical bowls while those of later Cajamarca styles are painted on flaring bowls, ceramic cups, and tripod vessels. Throughout the ceramic seriation, figuration is relatively rare in comparison to other regional styles (ex. Moche, Chimú, Recuay). Although the Reichlins note popular stylized Cajamarca feline images, the majority of design elements in Torrecitas-Chavín and Cajamarca styles are geometric and abstract.

Regarding the earliest 'Torrecitas-Chavín' ceramic style, the Reichlins discuss its association with a presumed 'classic Chavín' style. They argue that since the 'Torrecitas-Chavín' style does not boast the figurative motifs of the Classic Chavín style, it might be an earlier style. Although the Reichlins recovered minimal 'Torrecitas-Chavín ceramics through their excavations, they argue that the ceramics appear immediately below the Cajamarca I styles with identifiable diagnostic transitions. The ceramic sequence, starting with the Torrecitas-Chavín style, thus appears to be continuous within the Cajamarca region. There is no cultural break between a Chavín style horizon and a local Cajamarca style evolution. The excavations by the Japanese Mission at Huacaloma and Layzón came to support this observation and relative ceramic seriation.

#### 4.4.2 Japanese Expedition to Nuclear America

From 1979 to 1985, the Japanese Expedition to Nuclear America focused attention on the Cajamarca region. The expedition team began in 1979 by excavating the site of Huacaloma, and in 1982 they returned to investigate further at this site and Layzón

on a nearby hilltop (Seki 1993; Terada and Onuki 1982, 1985).<sup>xiii</sup> During those field seasons, the team further explored around fifty (50) other regional sites for comparative results and to establish a more complete Cajamarca sequence (Matsumoto 1993). The extensive research and intensive site excavations exposed patterns in monumental architecture, and advanced a ceramic sequence comparative to that of the Reichlins (1949; Table 4.5). Since the ceramics recovered from the ‘Toma’ at the Cumbemayo Canal pertain to the sequence recovered at Huacaloma and Layzón, I confine my discussions here to these publications.

The site of Huacaloma rests in the Cajamarca basin (2795 masl), southeast of the modern city and largely due east of Cumbemayo, Agua Tapada and Layzón. The site comprises a small platform construction of around 140 meters squared. It was developed as a ceremonial center in the Formative period and reused for domestic occupations through the Middle Horizon. Through five seasons of excavations at the site, Terada and Onuki eventually established four phases of Formative Period occupations followed by three phases of Cajamarca domestic site use (1985). Based on recovered radiocarbon dates and corresponding changes in material culture (ceramics and architecture), they produced the following Formative Period sequence applicable to the larger Cajamarca regional research (Seki 1993; Table 4.6):

<b>Cajamarca Formative Period Sequence</b>	
Early Huacaloma	1500-1000 BCE
Late Huacaloma	1000-550 BCE
EL	550-250 BCE
Layzón	250-50 BCE

Table 4.6

The site of Layzón sits on the flank of the San Vicente quebrada to the southwest of Cajamarca at 3116 masl. The excavations at the monumental center in 1982 and 1989 revealed occupations from Late Huacaloma through Layzón periods, with minimal subsequent destructive Cajamarca domestic occupations. The archaeologists were thus able to map out six terraces of Late Huacaloma architecture carved out of the natural rocky hilltop and a central stone edifice rebuilt during the Layzón period (Terada and Onuki 1985; Seki 1993). The investigators acknowledge the placement of Layzón in close proximity to the site of Agua Tapada and on route to the Cumbe Pass and the Cumbemayo Canal (ibid.)

Through analysis of these two monumental centers, the investigators and others have cited a number of correspondences between these occupations, the location and construction of the Cumbemayo Canal (ibid.; Williams and Pineda 1982). They further have compared the Formative Period material cultures of the Cajamarca centers with those of neighboring regions. Such correspondences provide significant insight into the role of trade and degree of cultural interaction between the cited regions. Since a comprehensive vision of these connections is necessary to frame an overall interpretation of the Cumbemayo Canal and a larger cultural interaction sphere, I offer here some of the pertinent ceramic and architectural comparisons for each period.

Early Huacaloma (1500-1000 BCE): The Early Huacaloma Phase presents the earliest ceramic occupations and settlements identified in the Cajamarca region. The limited evidence of these occupations derives from two rooms (R-1 and R-15) excavated at the site of Huacaloma. The rooms are small rectangular chambers with central “shallow hemispherical” fire pits set in the floor (Terada and Onuki 1985: 267). While the arrangement of the central fire pit recalls the design of Kotosh Religious Tradition centers at Kotosh, La Galgada, and Huaricoto during the Early Formative (Preceramic) period, a number of features differ slightly from this well known tradition to the south.

These include the subterranean flue leading outside from the central fire pit, as well as the installation of a floor bench, or a lower floor layer around the fire pit (Terada 1985). Yet the concept of a small chamber for non-domestic activity recalls the same intent. Terada and Onuki (1985) note that this architecture contrasts with that of Montegrande (middle Jequetepeque Valley), where differentiation between domestic and larger ceremonial structures suggests greater social complexity and larger populations.

Regarding the ceramics, the investigators identify the impressed ribs, course brown, brown smooth and red smooth, and appliqué decorated ceramics as largely Early Huacaloma styles. They compare these ceramics with those recovered at the sites of Pandanche (Chota, below Pacopampa), Montegrande (Jequetepeque Valley), and Cerro Blanco (near Kuntur Wasi) (ibid.; Map 2). The comparative ceramic similarities argue for a shared cultural tradition; they connect the Cajamarca basin to cultural develops entering from the western coastal valleys. The material culture thus supports cultural connections between the Jequetepeque Valley, north highland Chota region, and Cajamarca basin by the Early Huacaloma Period.

Late Huacaloma (1000-550 BCE): The Late Huacaloma Phase was the most extensive construction phase at the monumental centers of Layzón and Huacaloma. The ceramics include a set of new and distinct decorative techniques, which exhibit geometric motifs and anthropomorphic heads. The material culture thus offers observable comparisons with contemporary local and regional site centers.

The site of Huacaloma was considerably amplified during the Late Huacaloma Phase, creating “a large platform complex with high retaining walls and a stone-lined staircase” and enclosing a previous entry into a tunnel staircase (Terada and Onuki 1985: 268). The platform foundation at Huacaloma comprised large, aligned stone masonry, which carved stones recall the Toma sector and Cumbemayo Canal. The investigators at

Huacaloma also cite the thick stucco on the monumental edifice, which was apparently decorated with polychrome figurative images at some places. Only a few fragments were recovered; however, they bear facial images recalling Cupisnique iconography and similar designs on the Late Huacaloma post-fire painted and incised ceramics (Terada and Onuki 1982: Plate 86; 1985: Color Plate 2).

The excavations further discovered an over nine (9) meter long canal built under the floor of Platform 1 (Pla-1) of the monumental architecture. Based on the placement and length of the channel, Terada and Onuki (1985) argue that the canal is ritual – rather than utilitarian – in function within the ceremonial site. The authors further posit that “the underground canal at Huacaloma bears a close resemblance to those at Pacopampa, Kuntur Wasi, La Pampa (Onuki and Fujii 1974), Chavín de Huántar, and Kotosh (Izumi and Sono 1963: 67; Izumi and Terada, eds. 1972: 99), and it is interpreted as being characteristic of the highland sites of the Formative period” (Terada and Onuki 1985: 269). I agree with their assessment, comparing the stone-lined canal at Huacaloma with those built into other contemporary monumental centers.

During the Late Huacaloma phase, the hilltop center of Layzón was carved out of the bedrock into six distinct stone terraces. At the fourth tier, complex petroglyph designs were carved into the bedrock façade to either side of the central stairway (Seki 1993: Fig. 9). In their conclusions, Terada and Onuki posit that such “incised decoration” at Layzón “reminds us of that at Kumbemayo, located very close to Layzón” (1985: 269). The original form of the decorative designs is no longer discernable; however, they certainly boast similar aspects to those along the Cumbemayo Canal, such as the manner of carving and into the local bedrock façade. Along with the four platforms at Agua Tapada, such terraces at Layzón face toward the continental divide and the western pass.

The Late Huacaloma ceramic sequence includes a number of variant styles, from post-fire painted and incised bowls to polished black and red vessels. As mentioned above, post-fire painted fragments were recovered from the ‘Toma’ of the Cumbemayo

Canal. The ceramics of this phase further resemble styles from the north coast and north highlands at Pacopampa, which decorations often exhibit anthropomorphic faces and fanged mouths of the Cupisnique style (ibid.). The investigators further note the exclusive presence of Cupisnique stirrup spout bottle fragments during the Late Huacaloma phase (1000-550 BCE) in the Cajamarca region (Terada and Onuki 1985: 270; also Seki 1993). Based on these materials, Inokuchi (1998) and Onuki (1995) argue that the Late Huacaloma phase boasts clear interaction with the Idolo phase (1000-800 BCE) at Kuntur Wasi and Cerro Blanco. The Late Huacaloma ceramics – the stylistic and iconographic parallels – thus imply contemporaneity and interaction between the monumental constructions at Huacaloma and Layzón in the Cajamarca basin, Kuntur Wasi in the Jequetepeque Valley and the ‘Toma’ of the Cumbemayo Canal.

Finally, the red-on-orange style of the Late Huacaloma phase corresponds with red-on-orange ceramics common at Kuntur Wasi (Kato 1993), as well as examples clearly imported into and deposited at the site of Chavín de Huántar, in the north-central highlands. In the Gallery of the Offerings at Chavín de Huántar, Lumbreras recovered a number of non-local ceramic styles deposited together within the subterranean chambers. These included examples of incised and bi-color Classic Cupisnique stirrup spout bottles. Lumbreras labels the red-on-orange short-neck jars and single spout bottles as ‘Mosna,’ and he argues the sphere of such style ranges into La Pampa and up through Cajamarca (1993, 2007). The ‘Mosna’ style clearly corresponds to the red-on-orange ceramics in the Late Huacaloma Phase at Huacaloma in Cajamarca; as such, it suggests an intimate link extending between Chavín de Huántar and Cajamarca within the northern highlands.

EL and Layzón (550-50 BCE): The EL Phase (550-250 BCE) marks a transition from the preceding Late Huacaloma styles into the distinct Layzón occupations. The Layzón Phase (250-50 BCE) is characterized at Huacaloma by the destruction of the platform complex. Ceremonial activities appear to shift to the upper altitudes around the Cajamarca basin,



such as at Layzón. At this hilltop site, the large blocks of the Late Huacaloma platforms were reused to create a central superstructure, which boasted rounded corners and circular superstructures. At both Huacaloma and Layzón, the excavation team recovered small stone-lined channels built into the architecture.

Layzón Phase ceramics are characterized by a departure from preceding Late Huacaloma styles and transition into a local Cajamarca style. During this phase, the post-fire paint and stirrup spout bottles no longer appear. The Layzón ceramics generally boast white or cream surface with red pre-fire paint or slip. Decorations may be stamped circles, circles with dots and concentric circles, and the common forms shift to hemispherical bowls. Scholars have compared the Layzón styles with La Copa (450-250 BCE) phase ceramics at Kuntur Wasi and Pacopampa-Chavín (800-200 BCE) style ceramics at Pacopampa (Inokuchi 1998). Layzón ceramics further appear in Salinar occupation layers at the site of Cerro Arena in the Moche Valley, suggesting coeval styles and trade between these regions (Brennan 1980; Elías Mujica 1984). The presence of such Layzón ceramics on the coast reinforces the extent of regional exchange between the Cajamarca region and north coast throughout the Formative Period. This regional setting and exchange between highland site centers provides context by which to examine the design and meaning of the Cumbemayo Canal, its petroglyph decoration and greater hydraulic system.

#### **4.5 Petroglyph Analysis**

Petroglyphs are images or designs carved, pecked or chiseled into a stone surface, which facing does not permit scientific dating of the carved images. Petroglyph images may be rather temporally assigned based on three variable sets of information: 1) material in the ground strata fronting the stone façade, 2) proximity to surrounding cultural features, or 3) style or representations of the petroglyph itself. When petroglyph

images are representational, or bear a distinctive style, this may permit to assign them to a particular cultural period.

Aside from its artistic carving from the natural bedrock, the Cumbemayo Canal hosts a number of petroglyph designs at various locales along the first course of the channel. I have already presented above studies performed by Tello (2004), Núñez Jiménez (1986), and my project registering the petroglyph images along the Cumbemayo Canal. The carved designs in locales along the canal include representational, geometric or abstract forms; these may individually date to different periods in time. Nevertheless, the most elaborate petroglyph design is located under a large rock overhang and supports a chronological dating of the canal to the Formative Period. The proliferation and fine carving of three-step and zigzag patterns at critical junctions along the canal further appears intentional to the original canal design. Therefore, I highlight here these related visual cases associated with the Cumbemayo Canal.

#### 4.5.1 Step and Zigzag Designs

Angled step and zigzag patterns occur throughout the canal form and with the petroglyph groups along the associated walls and caves (Fig. 4.56-4.57, 4.64-4.65, 4.4.72-4.75). As discussed above, the zigzag design of the canal walls may have served both to regulate the flow of water and to enhance the acoustics of the channel. It would seem that this canal design feature was symbolic and important during the rainy season given the repeated use of a zigzag pattern in the associated petroglyphs,. A multi-part step motif occurs at four key locations along the canal and associated cave structure. These include: 1) the Throne (Fig. 4.57) overlooking the canal intake; 2) Group IV (Fig. 4.65) over the zigzag portion of the canal; 3) at the Sacred Cave I (Fig. 4.73) below the canal and overlooking the river, and 4) at the Sacred Cave II (Fig. 4.75) at the final major tributary from the north that contributes to the Cumbemayo Canal and Cumbemayo River

(Fig. 4.1). In the case of Group IV, the step motif occurs directly above the zigzag design in the canal walls, reinforcing the symbolic role of this canal formation and suggesting their contemporary placement.

During the Late Huacaloma Phase (1000-550 BCE), post-fire painted bowls regularly include step design motifs as decoration around the outside face. This design is simple in its geometric form and identifiable throughout ancient Andean iconography (ex. step and volute designs in north coast visual programs: Section 5.8.4). Within the Cajamarca ceramic seriation, however, step-like or zigzag formations are considerably and significantly more prevalent in Formative Period ceramics than through Middle Cajamarca floral and cursive styles. This would support the symbolic incorporation of this geometric motif in Middle to Late Formative Period monumental canal.

The first sector of the Cumbemayo Canal is itself a monumental zigzag petroglyph (or geoglyph), which structures a ritualized landscape. Along with the sweeping curves and cave structures, it makes clear the absence of a strictly utilitarian reading of the canal construction. During the rainy season, the zigzag portions of the canal may have produced the most dramatic acoustics through the intense water flow through these sectors. Such acoustics likely comprised a critical component to such monumental water architecture feature, its ritual use and symbolic function.

The Cumbemayo Canal, in this narrow quebrada laden with *ichu* grasses and fallen boulders, required regular maintenance for its continued utility and function (as it does still today). Further elements argue for the social importance and ritual use of this canal: 1) the large-scale design of the channel requiring labor to carve into the landscape; 2) the stone-lined construction remnants at the ‘Toma’ sector of the canal; and 3) the two modified cave structures (Sacred Caves I, II) at intervals along the channel route. As I venture further below, these features together argue for clear social participation and ritual practice at and around into this water management program – its construction, symbolic design, regular maintenance, and ritual landscape setting.

#### 4.5.2 Complex Petroglyph

The complex petroglyph image occurs on a rock that is 1.4 x 2 meters in size, extending lengthwise over the canal floor (Fig. 4.70-4.71). The rock face above the canal projects slightly over the center of the channel; it has been smoothed to present a flat surface for carving. As noted above, the complex nature of the petroglyph etched into the rock face has drawn considerable attention from investigations at the archaeological site (Table 4.4). I have reproduced the renditions of the design in these previous reports to provide a record for comparison and discussion of form (Fig. 4.16, 4.18-4.19). The digital photography and drawings of this feature produced through my project most closely recall the illustration completed by Tello in 1937, although the latter is quite small and without scale (compare Fig. 4.16 and Fig. 4.71). The roughly scaled drawing of the petroglyph by Nuñez Jiménez presents a more abstract record of the carved design.

Finally, the design of the complex Cumbemayo petroglyph closely recalls the style, technique and material of the carvings along the Late Huacaloma Phase façade at Layzón (Seki 1993: Fig. 9; Terada and Onuki 1985). At the monumental hilltop center of Layzón, the early carved designs are considerably worn down; only the bottom edge remains. Such elements do not offer ready material for visual comparison; however, they do support the early construction and decoration of the coeval monumental centers.

The complex petroglyph remains largely unidentifiable in form. Nevertheless, the image incorporates two sets of three-part streamers, similar to the Throne image and Sanctuary [Sacred Cave II] (compare with Fig 4.57-4.71). These zigzag components symbolically tie the complex image to the canal construction and design. Perhaps the ‘flowing’ step motif along the canal serves to emphasize the symbolic movement and control of water through the landscape, augmented by its acoustic role in canal design. The Cumbemayo Canal clearly comprised ritual water management feature broadly

linking Middle to Late Formative Period (1200-250 BCE) monumental centers along a symbolic hydraulic system.

#### **4.6 Formative Period Water Management**

The Cumbemayo Canal may be defined as symbolic water architecture. The aqueduct diverts a perennial river source over three kilometers across the Andean continental divide. Such water could have served to supply water into the San Vicente quebrada and Cajamarca basin; however, the sufficient water supplies in these regions argue against this solely functional intention of the Cumbemayo Canal. The artistic carving and design of the first *tramo*, along with the eastern diversion of the second and third *tramos*, rather support a symbolic interpretation of this extensive construction feat.

##### **4.6.1 Northern Highland Monumental Centers:**

In the current archaeological record, there are no known open-air channels of similar design to the Cumbemayo Canal. During the Middle through Late Formative Period, however, subterranean stone-lined canals first appear in monumental architecture of numerous excavated highland centers. I have cited above the 900+ cm canal in Platform 1 of Huacaloma during the Late Huacaloma Phase (1000-550 BCE), which the investigators presume had a non-utilitarian function. In the succeeding El and Layzón Phase (500-50 BCE) occupations at both Huacaloma and Layzón, the monumental architecture included a number of similar but smaller stone-lined channels (Seki 1993; Terada and Onuki 1985). These two sites, however, are just examples of a seemingly larger trend in the Formative Period monumental centers of the northern highlands, which further boast documented examples of stone-lined subterranean canals. Underground channels have been registered at sites such as Kuntur Wasi, Pacopampa, La Granja (El

Rollo), and Poro Poro in the northern highlands, as well as La Pampa, Huaricoto and Chavín de Huántar in the north-central highlands. Although the canals at these centers have not been completely registered or published, a review of the archaeological contexts reveals certain noteworthy correspondences, in temporal development and design.

Kuntur Wasi: The most well-documented monumental canal system appears at Kuntur Wasi in the Jequetepeque Valley (Map 2; Onuki 1995). Through their excavations at Kuntur Wasi from 1989-1993, the Japanese Mission archaeologists registered the construction of stone canals beginning in the Kuntur Wasi Phase (800-500 BCE) and continuing into the Copa Phase (500-250 BCE). The investigators do not cite any canal structures pertaining to the Idolo Phase (1100-800 BCE); however, they note that minimal evidence was obtained regarding these earliest constructions at the site (ibid.).

The published details of the architectural plans and excavations evince an organization of the canals within the monumental setting and terraced constructions of the Kuntur Wasi and Copa Phases. During the Kuntur Wasi Phase, the excavators document remnants of subterranean canals running underneath the central square plaza, the southeast plaza and the north east platform (ibid.: 12). One canal in particular apparently extended northeast towards the frontal terraced façade. The investigators argue that the drainage channels along the primary staircase were already in use by this time (ibid.: Fig. 6), perhaps connected to this canal portion.

In the succeeding Copa Phase (500-250 BCE), the investigators registered a number of stone-lined subterranean canals. One channel runs from underneath the southeast corner of the square plaza towards the southeast, through constructions on the hilltop site. Another significant canal begins in the east plaza and runs northeast, to once again direct along the frontal façade and down through the channels along the principal staircase. Onuki notes that this “sistema de desagüe, bien planeado y preparado” runs

nearly forty-six (46) meters from the primary terrace to its descent along the stairway (ibid.: 13). The subterranean canal is further marked at its start in the east plaza by a large red stone that caps the opening of the channel (Fig. 4.78). The stone is disk-shaped with a central hole (doughnut) and measures sixty centimeters (0.6 m) in diameter (ibid.: Lam. 5:1-2). It signifies intentional access to this primary water channel within the plaza, perhaps suggesting the ritual or performative use of these water channels along with its role for drainage of water from the sunken terrace-top plaza.

Such documented subterranean canals at Kuntur Wasi undoubtedly served to drain excess rainwater from the uppermost terrace constructions. Yet their design within the monumental architecture appears to have provided for symbolic and non-functional (ritual) use. The intentional channeling of water nearly fifty (50) meters toward the frontal façade would have provided a visual display of water management to an audience below, as the water projected down either side of the principal stairway.

Pacopampa: At the site of San Pedro de Pacopampa above the Chotano River, Rosas and Shady (1970) document the presence of underground ‘galleries’ from their first excavations. Through his recent and ongoing research at the center, Yuji Seki has documented the primary role of these ‘galleries’ as a system of subterranean canals (2006). Although plans of these features have not yet been published, at least one visible stone-lined channel runs along the south face of the hilltop terrace. It empties at an opening in the monumental stone wall façade of the primary uppermost third terrace. According to Seki, this monumental façade pertains at least to the Pacopampa I Phase (1200-900 BCE). The stone-lined channels throughout the site apparently increase into the Pacopampa II Phase (900-200 BCE) (Seki, personal communication 2009). In his site reports, Seki does not venture an interpretation of the function or design of the underground canals beyond their role for drainage. The comparative high-level of annual rains at this site fully supports this practical consideration.

As at Kuntur Wasi, however, the Pacopampa west-east canal clearly directs toward the frontal façade, perhaps organized for the display of water management at the monumental center. The canals further increase in number through contemporary periods at these two sites, from the Middle Formative (1200-900 BCE) to Late Formative Periods (900-200 BCE). The construction of subterranean water channels at these north highland sites suggests not only an increase in site planning and drainage for conservation of the monumental buildings and plazas, but also the creation of a symbolic landscape where water control may have been publicly exhibited and ideologically imbued.

Highland Centers: Subterranean stone-lined canals further have been cited for Late Formative Period (900-200 BCE) occupations at La Granja [El Rollo] and Poro Poro (Alva 1988b; Wester el al 2000). At Poro Poro, the subterranean canal occurs in the same context as petroglyph images that recall those at Layzón and Cumbemayo, carved into a local bedrock hilltop that has been modified as a monumental center (Alva 1988b). The stone construction and cache of stirrup spout bottles recovered at this site suggest a predominately Late Formative Period occupation.

Canals further appear at sites in the north-central highlands, such as La Pampa and Huaricoto (Burger and Salazar Burger 1985; Terada and Onuki 1969). At the latter center, Burger and Salazar-Burger cite the construction of subterranean canals beginning during the Huaricoto Phase (Middle Formative) and continuing through the La Capilla Phase (Late Formative) (1985). They argue against a strictly utilitarian function since:

natural drainage at Huaricoto is quite good, and drainage canals would have been unnecessary under normal circumstances, especially if ceremonies were confined to the dry season. It is likely that these canals had a nonutilitarian function related to that of the adjacent ceremonial hearths; they could have been involved in rituals of agricultural fertility and the symbolic control of water. (ibid.: 129)



Along with the examples from Kuntur Wasi, Pacopampa, and Huacaloma, these subterranean water management features appear to have served as critical components of Middle to Late Formative Period highland monumental architecture – its symbolic design and perhaps ritual use.

#### 4.6.2 Chavín de Huántar:

Contemporary with these monumental canal constructions in the north highlands, the site of Chavín de Huántar likewise incorporated numerous underground channels. Canals run underneath the stone edifice, Circular and Square Plazas at the site, directing the water east toward the Mosna River. Many of the canals undoubtedly serve a practical use for drainage of this active river junction. Chavín de Huántar notably is nestled into the valley floor of the Callejón de Conchucas, within the north-central Andes and to the east of the continental divide. The monument is located at the junction of two substantial highland rivers: the Wacheksa River, which descends from the west, joins with the Mosna River, which runs north to empty into the Marañón River system and ultimately, Amazon Basin. Scholars have cited this location as symbolic and intentional, whether for regional trade or a symbolic river junction (Burger 1992, Lumbreras et al 1976).

Based on the registered water canals, Lumbreras proposed a hypothetical analysis of the hydraulic and ritual function (Lumbreras et al 1976). He argues that an ancient intake once situated to the west of the Chavín monumental along the Wacheksa River. Water would then have been channeled east toward the monument, behind Building B (Old Temple). Lumbreras cites the Gallery 8 above the Lanzón for its acoustic features and the water channel that runs down the main staircase of the Circular Plaza as evidence of this significant hydraulic aspect. He argues that the force of the water would have been sufficient to push it up through a channel behind the Lanzón and produce a loud echo

throughout the internal stone shafts and galleries as it rushes forward and down the Circular Plaza stairwell.

During his research at the site, Lumbreras and his excavation team tested this channel with running water, highlighting the acoustic effect. I am unaware of any follow-up archaeological examinations regarding this hydraulic hypothesis and the cited exterior subterranean canals (*ibid.*). Nevertheless, the theory – impressive acoustics of rushing water behind the Lanzón to enhance the spectator experience – has remained prominent in scholarly and popular conception of the ceremonial site. It supports the presumed significance of the auditory effect of the Cumbemayo Canal, through its zigzag design and heavy seasonal water flow.

#### 4.6.3 Coastal Monumental Centers:

At this time, I am not aware of documented examples of subterranean stone-lined canals from Formative Period centers along the north or north-central coast. In his recent and ongoing excavations at Zarfán in the Lambayeque Valley, Walter Alva argues for the presence of a stone-lined channel in association with Cupisnique cultural levels at the site (personal communication 2007). Richard Daggett also cites the presence of underground ventilation shafts and intricate canals in his survey of Formative Period sites of the Nepeña Valley (1984: 263, 272). If stone-lined channels exist in Middle to Late Formative period coastal centers, these examples would support the symbolic structuring and or ritual use of such water management features during this time. The dry coastal environment, however, does not provide for sufficient rains to make canals necessary for drainage. They could serve nevertheless to provide consistent source of potable water and the public display of this social or political role of the elite individuals.

#### 4.6.4 Social Role of Water Management Features

The monumental subterranean canals that appear during the Middle to Late Formative Period at the northern highland (and possibly coastal) centers, which I have reviewed above, contrast in one significant manner with the Cumbemayo Canal. The former large-scale water management projects served at these monumental centers to make explicit a political or ideological connection to water control. The centers of Pacopampa and Kuntur Wasi notably boast an apparent social stratification and elite class, which may have appropriated such a symbolic role. The social status appears through the recovery of material goods and imported trade wares, as well as high-status tombs at both of these centers (Onuki 1995, 1997; Seki personal communication 2009).

The Formative Period sites in the Cajamarca basin, such as Huacaloma, clearly interacted with such monumental centers to the west and north. The Cajamarca regional centers, however, do not appear to have manifested the same degree of social status differences (Seki and Yoneda 2006). The monumental centers of Huacaloma and Layzón evince the presence of a large Formative Period population in the region and the labor to construct large-scale architecture. Nevertheless, the excavators did not recover considerable evidence of elite material goods, architectural sectors, or highly-developed ritual program (Seki 1993; Terada and Onuki 1985). Although they recovered evidence of large-scale stone construction and subterranean canals, these features are not equivalent in size and scale to those at the outside regional highland centers.

This situation in the Cajamarca region thus prompts consideration as to the social nature of the Cumbemayo Canal as an ideological feature in the landscape. As an avenue for interpretation, late pre-Hispanic and modern practices in highland Andean community rituals and canal maintenance may serve as fruitful comparative models. A number of ethnographic studies have been performed on modern Andean communities and the rituals surrounding the regular cleaning and maintenance of community canals. For the communities, the canals provide source of potable water and water for irrigation (runoff)

farming. Ethnographic studies in the Andes cite the role of social events scheduled around the cleaning of these canals, which social obligation must be met by members of the community (ex. Paerregaard 1994; Treacy 1994). The large-scale canals, which serve various sectors of an Andean community, provide a setting for regional unification, social participation and ritual practice for the maintenance of life-giving mountain water. The modern ethnographic model thus encourages a perspective as to the symbolic role of collective ritual and labor on a monumental feat.

Clearly, the Formative Period occupants in the Cajamarca region amassed enough communal labor to construct numerous basin and hilltop centers – at Huacaloma, Layzón, Corisolgona, Agua Tapada, Cerro Consejo, etc (Map 3). The considerable stone construction projects and multiplicity of Formative Period centers at this time greatly imply the ability – and perhaps driving social impetus – to construct such a local monumental feature as the Cumbemayo Canal. It is possible that this great aqueduct in the landscape provided a key symbolic structure unifying these Formative Period centers. The sites may have unified around this ritual feature constructed onto the landscape, similar to the symbolic social role of the Inca ceque system (Bauer 1998).

The stone constructions at the Toma, and the cave structures placed strategically along the canal route, argue for its collective ritual use. The practice of using cave structures overlooking active water tributaries occurs similarly at other cave sites in the Cajamarca region, as at La Esperanza (Narvaez Vargas 2001). The abundant Late Huacaloma style ceramic fragments recovered immediately in front of this cave structure evince its use during the Formative Period use. The cave at La Esperanza thus correlates well with the placement of Sacred Cave II along the Cumbemayo Canal.

Finally, the Cumbemayo Canal overlooks and traverses the Continental Divide, which provided the predominant access route between the Cajamarca basin and advancing Cupisnique monumental centers to the west, which span the Jequetepeque River system. The Cajamarca basin was clearly interacting with these western Cupisnique

centers during the Formative Period. The increasing trade and exchange through this valley is not only supported by the related ceramic programs. The numerous Cupisnique-Chavín petroglyphs throughout the valley further argue for active routes of travel, as they do in Alto de las Guitarras between the Chicama and Moche Valleys. It is thus likely that Cajamarca communities might have social, ritually and ideologically incorporated the water management concepts development at these contemporary north highland centers. The Late Huacaloma communities, which occupy numerous monumental centers that are densely concentrated on the southwest side of the basin, thus may have communally developed around the Cumbemayo hydraulic system, its ritual and symbolic significance.

#### **4.7 Final Considerations**

The Cumbemayo Canal remains a relatively unique monumental feature in the northern highlands of Peru. The canal system likely witnessed continued reuse and adaptation through the time of the Inca. Yet the canal construction may be dated to the Formative Period by various lines of evidence – archaeological, visual, and conceptual – in the Cajamarca region. Through my field project in 2007 and the comprehensive investigation and contextual analysis presented above, I posit that the construction of the Cumbemayo Canal pertains to the Late Huacaloma phase (1000-550 BCE) or Middle to Late Formative Period in the northern highlands of Peru. The development of such a monumental stone canal system during this time is substantiated by the increase in stone-lined channels throughout the highland sphere during this time.

To summarize, this temporal placement and contextual meaning of the Cumbemayo Canal may be drawn from the following elements:

- 1) Ceramics: Out of the limited ceramic fragments recovered from the Toma section of the canal, the greatest number were post-fire painted and incised shards reflective of the Late Huacaloma phase (1000-550 BCE).

2) Stone carved design: The canal was carved out of the local bedrock and the stone used in the 'Toma' region appears to reflect the size and shape of these large extractions. These two features relate closely to the bedrock terracing and large stone construction at Layzón during the Late Huacaloma phase.

3) Petroglyphs: The unique complex petroglyph found under a rock overhang in the first canal section suggests a Formative Period style related to local ceramic decorations and coastal design influences.

4) Water Management: There is a clear focus on stone-lined canal construction developing in the Late Huacaloma Period at contemporary monumental centers. Regional highland centers further incorporate monumental subterranean canals, which seem to exceed the functional needs of drainage. The presence of such channels, dug into the ground at these sites and directed eastward, thus may provide a crucial feature regarding the interpretation of symbolic, ritual, or political display of water management by local monumental occupations.

Regarding this final contextual analysis, I address both north highland centers and Chavín de Huántar for their comparative incorporation of subterranean stone canals. The role of this architectural design thus forces consideration of the respective coastal and highland spheres of cultural influence.

The Cajamarca basin notably rests at a right angle between the highland Chavín and coastal Cupisnique cultural spheres. My interest in this region, in fact, stemmed from the information it may provide for better distinguishing between (or correlating) these closely related Formative Period cultural traditions. As I have noted previously, the Cupisnique cultural complex appears to have influenced (on a perhaps limited but significant basis) the Cajamarca region during the end of the Middle Formative (1200-900 BCE). It may have prompted an increase in polychrome decoration on the monumental sites (ex. Huacaloma) and introduced coastal ceramic forms (ex. stirrup

spout bottles). In this chapter, I posit that the Cumbemayo Canal likely pertains to this extra-regional cultural influence. To understand the social or ideological nature of this cultural influence, in the following Chapter 5, I pursue the visual evidence of trade and interaction through the Jequetepeque valley to establish a context for discussing a broader Cupisnique cultural sphere.

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<sup>i</sup> *Ruma-simi*, or *Quechua*, is the indigenous language of Peru spoken by the Inca around the southern highlands and their capital in Cuzco. The Inca brought *Quechua* into the Cajamarca region through their conquest around 1460, replacing the local dialect of the Cajamarca cultures. At the time of Spanish arrival, the Cajamarca basin served as the northern Inca capital of a divided empire. In 1532, Pizarro conquered the city, holding for ransom and ultimately killing Inca Atahualpa, and subsequently imposing a strong Spanish presence. Given the imposing but short-lived conquest by the Inca followed by the Spanish, minimal indigenous language survives in the region today and often presents a blend of the three languages.

<sup>ii</sup> Regarding the return date to Cumbemayo, Xesspe (1956: 334) cites November 18, but the notes published later reference November 19 as the start of the ten-day project at the canal site (2004).

<sup>iii</sup> Of the Marañón Archaeological Expedition, the Casma Valley excavations in 1937 were published in 1956. This volume opens with the context of the Marañon Archaeological Expedition, its proposed vast undertaking of sites visits and research across the northern coast and highlands of Peru. It describes in detail, however, only the investigations at Pampa de la Llamas-Moxeke and Cerro Sechín. At the close of the volume, M. Toribio Mejia Xesspe includes a nineteen page appendix of the ‘Historia de la Expedición Arqueológica al Marañon de 1937,’ in which he references briefly the research performed at the Cumbemayo Canal (1956: 319, 320, 332, 334).

<sup>iv</sup> As the Reichlins discuss (1949), the term Marañón was never fully defined by Tello, being broadly associated with Early Intermediate Period styles across the highlands, such as Recuay and Huaráz. Through their research, the Reichlins propose the term ‘Cajamarca’ to define the particular Cajamarca basin ceramic tradition through its historical developments (Section 4.4.1).

<sup>v</sup> This article from *Tecnía* was later reproduced in *Historia de Cajamarca I: Arqueología* (Peterson 1985).

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<sup>vi</sup> Peterson utilized the more narrow cultural definition of ‘Cajamarca’ defined by that time through the archaeological research by Henry and Paule Reichlin (1949).

<sup>vii</sup> Based on surface collection, Seki registers a complete occupational history at Agua Tapada (Early Huacaloma to Inca-Cajamarca), a Formative Period occupation at Layzón (Late Huacaloma to Layzón) and a Late/Terminal Formative Period occupation at Cerro Consejo (Layzón to Initial Cajamarca) (2001).

<sup>viii</sup> In Fall 2007, I interviewed a longstanding and respected local Cajamarca engineer, Ing. Pablo Sanchez Zevallos, whose office sits adjacent the Instituto Nacional de Cultura - Cajamarca (INC). The INC archaeologists had referred me to Mr. Sanchez, with whom I pursued an interview through two research seasons. Through my research, I had not been able to locate documents or public records regarding the modern reconstructions on the Cumbemayo Canal. Mr. Sanchez thereby served as the most productive route to information regarding such canal reforms. The information presented here is largely the result of the interview I held with Mr. Sanchez in October 2007. I look forward to future communications with him.

<sup>ix</sup> For a discussion of the history of water management features in South America see Denevan 2001. In her extensive study of water architecture in South Asia (2002), Julia Hegewald discusses the challenges to adequate dating of such features given their common 1) below ground placement and 2) reuse through time.

<sup>x</sup> Clarkson and Dorn (1995) have dated the build-up of desert varnish on stone lintels of subterranean *puquios* in the Nasca Valley. Through their efforts, they recovered 1-signa calibrated radiocarbon dates between 500-700 CE, placing the stone channel construction within the Early Intermediate Period (also Schreiber and Lancho Rojas 1995). Given the open air design of the Cumbemayo Canal, its continued exposure to water runoff and the high-altitude climate, such techniques would not be viable for the archaeological site. The terrain surrounding the canal, such as that at the ‘Toma,’ is equally problematic given the limited stratigraphy and continued exposure to water seepage and runoff.

<sup>xi</sup> Villacorta Ostolaza (1998) records the visitors at around 100 per day. The visits take place in the morning hours to avoid the afternoon high winds or local rain showers.

<sup>xii</sup> The Japanese Scientific Expedition to Nuclear America initiated another field season at Huacaloma in 1985 (Terada and Onuki 1988), followed by two more seasons by the University of Tokyo under the direction of Yoshio Onuki in 1988 and 1989 (Matsumoto 1993). The latter seasons largely clarified architectural features, such as construction sequences and principal entrances. The ceramic sequence was modified to include the intermediate EL phase (550-250 BCE), which I utilize in this study.



## CHAPTER 5:

### CUPISNIQUE ICONOGRAPHY

#### Introduction

The assembled corpus of Cupisnique iconography addressed in this thesis suggests a limited set of motifs, from simple to more complex. While varied in form, many of the motifs repeat across visual media, highlighting their importance or relevance to the meaning of the visual program. Given their ubiquity, the more common motifs have been addressed by previous scholarship and include the feline-cactus scenes, *Strombus* and *Spondylus* dyad, decapitator figures, and dual-eye motif. The former two have been compared with Chavín iconography while the latter have been addressed largely as north coast and highland variants. Since the interpretation and localization of such motifs are crucial for a further analysis of the Cupisnique visual program, I begin with an in depth analysis of these four programs.

The feline-cactus scenes and decapitator figures present the most complex motifs in Cupisnique iconography. They consist each of a set of symbolic elements, which may vary across the known representations. The individual elements may further appear separately in the ceramic corpus, referring back to the complex motif. In the opening section, I delineate these two sets of symbolic elements and then trace the more independent forms throughout this chapter. Given their complex nature, I refer to these motifs heretofore as ‘themes:’ the Feline-Cactus Theme and Decapitation Theme respectively. As discussed in Chapter 2, the term ‘theme’ denotes the set of symbolic elements that may be combined or isolated in various formats and refer to the same symbolic concept, be it an ideological principle or ritual scenario. This study extends from scholarship that has – whether explicitly or not – approached such motifs in this manner (Cordy-Collins 1992, Larco 1941).

The *Strombus* and *Spondylus* dyad and dual-eye motif appear less complex than the preceding themes, but they are ubiquitous motifs in Cupisnique iconography. Among the symbolic dyads, each element may be independently rendered or combined with other motifs. Nevertheless, their intentional pairing across visual media suggests that their greatest meaning derives from the duality that they manifest together. The intrinsic symbolism of these dyadic motifs is substantiated by the fact that each dyad features prominently in monumental stone sculptures at Kuntur Wasi, as well as Chavín de Huántar. Since most preceding scholarship has focused on the monumental representations, I compare the ceramics to such examples.

Beyond the more complex and ubiquitous representations in Classic Cupisnique iconography, there appear a number of repeated figural forms, such as anthropomorphic and zoomorphic figures, as well as plants and other unidentifiable forms. I posit identifications for the actions of the anthropomorphic figures, as well as specify the flora and fauna. Including the graphite-paint ‘Transitorio’ ceramics, the Cupisnique programs reflect strikingly similar subjects. The succeeding Chongoyape-style stirrup spout bottles further display related figures, although they allude to changes in preferential treatment of specific fauna and flora. The north coast ceramic corpus thus represents a ritual sequence and selected ecology for the Middle Formative Classic Cupisnique. It also evinces possible ideological changes into the Late Formative. As I discuss in Chapter 6, such changes include increased emphasis on symbolic dualities and the expansion of a developing ritual ecology.

Apart from the figural images, Cupisnique iconography boasts a consistent program of abstract designs. The possible symbolism of certain geometric forms and abstract motifs was addressed briefly in Chapter 4 regarding the Cumbemayo Canal. In this chapter, I venture interpretations of the abstract motifs in relation to the figural forms. I discuss the possible role of such abstract forms as visual indexes within, as well as independent of, the greater ideological program. Their role as indexes, in some cases,

has been posited by previous scholarship, namely regarding the concentric circle motif (see Chapter 2). By expanding on these interpretive foundations, I trace more explicitly the geometric forms that perhaps symbolically link together the figural programs. Through their diversity in the corpus, the abstract designs provide the conceptual transition into the next section of this chapter.

The most crucial part of this chapter lies in tying together the motifs identified in Classic Cupisnique iconography – to evince their role as interrelated components of an overarching ideological program. As addressed with the abstract designs, when visual elements repeat among more than one figural type or identified motif, they may imply continuity in symbolic content and correspondence in meaning. Apart from the abstract elements, the linking features include a net design, isolated heads, wrinkled faces, and top knot hairdos. They also consist of more explicit associations made through the representation of composite figures: those blending avian, feline, and serpent features. These composite forms appear more ubiquitous in the Late Formative, suggesting the consolidation of the visual system.

Of all the Formative Period sites in the Ancient Andes, the monumental center at Chavín de Huántar has undoubtedly drawn the greatest scholarly interest since the first excavations by Julio C. Tello in the early 1900s. Since that time, numerous investigators have compared the Chavín sculptural program to north coast Cupisnique iconography, debating and re-debating the chronological and material relationship of these two cultures. In Chapter 1, I briefly summarized this ongoing debate on Cupisnique, so I shall not reiterate the arguments here. Nevertheless, it is worth restating the archaeological evidence from the galleries at Chavín de Huántar that evince contact between these regions, or importations from the north. Such materials include two species of marine shells, *Spondylus* and *Strombus*, as well as north coast and highland ceramics.

In preceding scholarship, the iconographic comparisons made between Chavín and Cupisnique regions have largely focused on a particular motif encountered in both

corpuses. I discuss these isolated visual parallels throughout the opening sections in relation to the particular themes and motifs. The studies, to my knowledge, have never been inclusive of the greater visual programs. The intention here is to cross-compare these programs as ‘visual systems’ in order to test the argument of an ideological foundation to Classic Cupisnique iconography – that is, through a conceptual relatedness with the early monumental center at Chavín de Huántar. This section will lay the last component of this chapter and will set the tone for the final chapter interpreting the Classic Cupisnique Cultural Complex and its legacy for the north coast of Peru.

## **5.1 Complex Themes**

### **5.1.1 Feline-Cactus Theme**

The greatest proportion of the Classic Cupisnique stirrup spout bottles represents a very select combination of figures, which often include feline and cactus forms (Fig. 5.1-5.2). Such bottles may further exhibit any combination of the following: serpents, volutes, deer, gourds, net- and step-designs, avian and anthropomorphic figures, isolated heads and other incised designs (Table 5.1 below). These elements may appear in addition to, or substituting for either of, the two primary figures. Given the primacy of the feline and cactus forms across the representations, however, I have retained the simple nomenclature as the ‘feline-cactus theme.’ While I posit the plausible meaning of the scenes, previous interpretations are highlighted first to demarcate the theme.

A number of scholars have addressed the extensive representational program of feline-cactus scenes in Cupisnique ceramics (Burger 1992; Cordy-Collins 1977, 1996, 1998; Elera 1993; Sharon 1974, 2000; Toshihara 2004). The earliest studies resulted largely from massive looting in the Jequetepeque Valley during the 1960s-1970s, when such stirrup spout bottles flourished on the art market. The compilation published by Alva provides five examples related to this theme, three from Talambo and another from

Chungal (1986: Figs. 174, 183-186). The context of these looted ceramics remains unknown, with the majority deriving from the Jequetepeque and Zaña Valleys. Through excavations at Puémape in the lower Jequetepeque Valley, however, Carlos Elera uncovered a feline-cactus bottle *in situ* within a Classic Cupisnique burial (Burial LVIII; 1993, 1998), supporting the temporal and spatial scope of this visual theme.

Shamanism: In the late 1970s, Alana Cordy-Collins began approaching this ceramic theme as symbolic of early shamanic practices in Peru. Cordy-Collins addressed the scenes through the feline forms, referencing variations in modern shamanic practices. She identifies the plant illustrated in the scenes as the San Pedro cactus (*Trichocereus pachanoi*), which is held in high esteem by modern Peruvian *curanderos* and boasts a high content of mescaline, a hallucinogenic agent. Therefore, Cordy-Collins set the stage to interpret the feline-cactus ceramics as primary evidence of *curandero* or shamanic practice in Formative Period Peru.<sup>1</sup>

Given the looted state of the feline-cactus north coast ceramics, the excavations at Chavín de Huántar provided the first contextual support for this identified theme. In 1972, Luis G. Lumbreras excavated the Circular Plaza at the site and uncovered a number of elaborately sculpted stone ashlars. The sculptures illustrate profile felines on the lower row and anthropomorphic individuals on the upper level. The plaza sculptures greatly enhanced the repertoire of Chavín feline representations. Along with Cupisnique-style stirrup spout bottles recovered from the adjacent Gallery of the Offerings, the images substantiated comparison with north coast iconography (Larco 1941).

The best preserved of the upper ashlars depicts a supernatural anthropomorphic form with fanged mouth, pendant eyes, and braided serpent hair (Fig. 1.11). The figure bears in its right hand a staff, which Cordy-Collins identifies as the San Pedro cactus (1977). Cordy-Collins thus notes that the Chavín supernatural figure is associated with

the hallucinogenic plant presented as a ritual object, and has feline counterparts below. She compares this Chavín sculptural program with two Classic Cupisnique feline-cactus theme bottles. Through this comparison, Cordy-Collins concludes that the Circular Plaza sculptures evince a Chavín cult (inclusive of Cupisnique) based on a form of shamanic practice, where the cactus acts as the medium and the feline as the animal counterpart, or avatar, of the shaman.

Successive scholarship has largely reiterated the association between the feline and cactus in Formative Period iconography, as well as its symbolic representation of shamanism in Chavín and Cupisnique art (Burger 1992, 1993; Cordy-Collins 1982; Rick 2004; Toshihara 2004). Burger also notes the presence of a miniature tenoned head that exhibits a supernatural fanged face with cactus stalks extending from the quadrangular eyes (*ibid.*: Fig. 181). Sharon interprets the cactus location as symbolizing its role in providing a form of ‘second sight’ (2000:5). The cactus in Chavín and Cupisnique iconography thus visually substantiates the nature of the Chavín religious cult, as one based predominately on ancient shamanic practice and the concept of transformation – human to feline, or human to animal.

Archaeological evidence such as snuff spoons, snuff trays, and small stone mortars may corroborate the interpretation of shamanic practice based on hallucinogenic plants or substances (Burger 1992). The small spoons, trays and mortars may have served in the preparation or ritual imbibing of hallucinogenic snuff. Such implements exist throughout the coast and northern highlands during the middle Formative Period, and they often host symbolic imagery (*ibid.*: Figs. 85, 86, 217). These objects, however, do not corroborate the use of San Pedro, however, as a primary agent. The role of this presumed ritual action thus remains juxtaposed to the cited archaeological evidence.

Ritual Ecology: Based on his research at Puémape in the Jequetepeque Valley, Carlos Elera proposes a slightly modified reading of the feline-cactus theme. Although he maintains its close association with Peruvian *curandero* and shamanic practice, Elera interprets the feline, cactus and serpent as symbolic of a particular ecological niche (1993, 1998). Previously, in the 1970s, Donald Lathrap had identified the serpent and feline forms in monumental Chavín art as the anaconda (*Eunectes marinas gigas*) and jaguar (*Felis onca*) respectively (Fig. 2.2), based on their prominent markings and the nature of these two predatory species. Like Tello before him, Lathrap founds his conviction on a tropical forest origin for Chavín culture, and subsequent diffusion to coastal Cupisnique. Following Larco, Elera supports a coastal origin for and interpretation of the Cupisnique visual program. He thus identifies the feline as the jaguar or puma (*Felis concolor*) and the serpent as the common *macanche* (*Boa constrictor otonii*) of the coast, also known for its bicolor patterning.<sup>2</sup>

Elera argues that these species often occur together at fertile watering holes, or *jagüeyes*, within the mountain valleys, where such felines and boas reproduce (1993). The osprey (*Pandion haliaetus*), a coastal fishing raptorial bird that migrates annually from the north, also may venture into these highland lagoons to fish during the summer. Their presence would imply a substantial population of fish during these months. Elera notes that modern Peruvian *curanderos* consider these watering holes as auspicious locations, where mescaline-rich San Pedro grows in abundance. Thus, Elera supports the *curandero* reading of the feline-cactus theme, albeit with an emphasis on a coastal origin and symbolic ritual ecology. The *jagüeyes* may be seen as a source of fertility and power, through the reunion of these predators and represented in the iconography.

Elera substantiates this theory with his interpretation of the bottle excavated at Puémape. The stirrup spout bottle from Puémape was excavated *in situ* in the grave of an adult female. The polished, grey ware bottle was found in the matting immediately above the cadaver, to the right side of the head. It represents a spotted feline with outward gaze

flanked by stepped volutes around the vessel body (Elera 1993: Figure 9; 1998: Figs. 86-87). Elera interprets the stepped volutes as representing mountains (steps) and water (volute) (see also Fig. 5.1). The stepped volutes would thus accord with his ritual ecology reading of the scenes, by referencing the mountainous water holes. The other items in the tomb consist of weaving materials, such as cactus spine needles, and prestige items, such as an anthracite mirror. The feline-cactus theme bottle was thus placed in the tomb of a high-status female in Classic Cupisnique society.

North Coast Continuity: In 1996, Cordy-Collins expanded upon the role of the feline as the counterpart, or avatar, of the shaman (see also 1998). She argues that the backward glance of certain feline images refers to their role as shaman in these scenes. That is, the glance recalls the ‘backward’ or ‘upside-down’ nature of the shaman in the transformed state as a feline. The averted gaze contrasts with the more frontal appearance of the feline (compare Fig. 5.3 and 5.4), which would recall the natural feline form. Cordy-Collins supports this proposal by interpreting the common volute elements in such scenes as ‘*remolino*,’ a whirlpool pattern envisioned under the influence of hallucinogens (1996).

By proposing these interpretations, Cordy-Collins refutes the ritual ecology argument put forward by Elera. But she holds firm to a shamanic interpretation of the feline-cactus imagery in Cupisnique ceramics. Cordy-Collins compares the feline backward glance in Cupisnique iconography with feline backward glances on Moche ceramics, in particular the popular Mountain Sacrifice scenes (Figure 5.9). In doing so, she posits strong cultural continuity between Cupisnique and Moche iconography on the north coast, which seemingly links shamanic practice with human sacrifice.

In similar pursuit, Douglas Sharon (2000) examines the feline-cactus representations in Cupisnique iconography to advance a study of north coast iconographic and ritual continuity. For his analysis, Sharon compiles and presents a



significant corpus of Cupisnique feline-cactus ceramics and their thematic variations. Similarly, his analysis draws together the comparison with north coast *curanderismo* and a ritual ecology interpretation, aligning his study with Elera (1993, 1998) and Cordy-Collins (1996, 1998). In contrast to the Moche mountain sacrifice scenes highlighted by Cordy-Collins, however, Sharon addresses symbolic continuity with a selective set of Moche figurines (2000). He posits that the shamanic power alluded to in the Cupisnique scenes compares with Moche images of cloaked female figures holding stalks of San Pedro cactus. In his assessment, the Moche figurines recall curing and *curandero* mediation, continuous with this north coast modern practice.

As this review attests, the feline-cactus scenes in Cupisnique iconography have inspired numerous studies in Formative Period visual culture. From the establishment of a Chavín horizon in Andean scholarship (Bennett 1943), scholars have maintained a strong conviction in the religious cult nature of this visual phenomenon (Burger 1993; Carrion-Cachot 1948; Larco 1941; Willey 1951). By the 1970s, the identified feline-cactus imagery filled a void in defining the religious cult, establishing the Formative Period as based on shamanic practice. This interpretation blended well with the earlier propositions by Larco (1941) and Tello (1923) regarding coastal and Andean feline symbolism, and its status in modern shamanism. The identification of the San Pedro cactus in Cupisnique and Chavín iconography provided the appropriate ‘catalyst’ to such ongoing scholarship.

Undoubtedly, scholarship on the feline-cactus theme provides the most substantial foundation of Cupisnique iconographic studies from which to extend the present analysis. As I mentioned, the feline-cactus theme may include a number of elements (Table 5.1). These elements may appear in addition to, or substituting for, the two primary figures of the feline and cactus.

Feline-Cactus Theme: Combined Elements		
Feline	Net Design	Anthropomorphic Figures
Cactus	Isolated Heads	Avian forms
Serpent	Step Design	Deer
Concentric Circle	Volute	Backward glance

Table 5.1

Previous scholars have discussed these additional elements, such as the serpents (Elera 1993), deer (Cordy-Collin 1977), volute (Cordy-Collins 1996, 1998; Elera 1993; Larco 1941; Sharon 2000), step-designs (Elera 1993; Larco 1941), and avian features (Elera 1993) in relation to the overall thematic interpretation. Yet there have been minimal explorations of the high degree of variability and flexibility in the theme. While I return to these variables throughout the chapter, I provide here a few examples to stimulate discussion of the embedded nature of Cupisnique iconography.

Feline with backward glance: The study by Cordy-Collins (1996, 1998) highlighted the importance backward glance of felines in Cupisnique iconography. Based on its use within the visual corpus, however, I might posit an alternative meaning for this symbolic gesture – as related to *impending capture*. For example, a Classic Cupisnique stirrup spout bottle illustrates the feline twice on opposing sides of the vessel (Fig. 5.3 and 5.4). In one instance, the feline glances outward while in the other the head is averted, looking back toward its hind side. A large modeled serpent coils around the vessel body; a chain-like pattern runs along its back. The head of the serpent juts out above the outward-looking feline while the tail wraps around the feline's neck, implying its capture. On the opposing face, the feline with averted glance appears to reference the *impending capture*,

with the gesture of looking back over its shoulder. The bottle would thus suggest a sequence of events from *impending capture* to *capture*.

This gesture of a backward glance only appears in relation to the feline in Classic Cupisnique iconography.<sup>3</sup> Of the sixteen observed ceramics, fourteen examples represent the feline with concentric circle markings.<sup>4</sup> Twelve of the ceramics place the feline surrounded by volutes, stepped volutes and cacti in various formats. Two of the stirrup-spout bottles, however, vary considerably from this common presentation. In one instance, the feline with backward glance appears within a cave-like arch (Elera 1993); it is surrounded by a net-like design filled with incised isolated human heads (Fig. 5.5).<sup>5</sup> This design is a major motif in Cupisnique iconography, and it relates to the decapitation theme (see below). The net design implies capture, in this instance of human heads. This particular bottle then, combining the feline and net design, reinforces the interpretation of the backward glance – as signifying *impending capture*.

The other bottle illustrates a fully modeled feline that appears to be overpowering a human figure (Fig 5.6). The feline glances back over its shoulder while firmly holding the human victim in its front claws. The concept of capture is thus reiterated. Other modeled felines do not present this backward gaze, either represented independently or when capturing animals such as deer (Fig. 5.7-5.8).<sup>6</sup> This scene may thus illustrate the conflation of *impending capture* and *captive state*, both related to subsequent *sacrifice*.

In order to substantiate this interpretation of the backward glance – as a symbol of impending capture associated with sacrifice – I follow the lead of Cordy-Collins in citing scenes of mountain settings in Moche iconography (1996). The Mountain Sacrifice pertains largely to Phase III of the Moche stylistic sequence (Bourget n.d.). During this early complex stage, the Moche appear to draw on preceding Cupisnique iconography. Parallel concepts in early Moche iconography should thus be instructive for comparison with Cupisnique forms. In Moche iconography, the backward glance occurs in scenes of human sacrifice. Such Moche sacrifice takes place in a mountain setting, where cacti

litter the scenes. The sacrificial victim lies face down over the top mountain crest, its hair and blood flowing down the mountainside like a river (Donnan 1978: Fig. 223-226). The feline may appear at the base of the scene, watching the sacrifice with averted glance (Fig. 5.9). As Elera notes (1993), the stepped volute design may also appear in the landscape, sometimes even rendered as the landscape (Fig. 5.10).

The backward glance in Moche iconography, however, is not limited to the feline figures. It appears on deer as well as humans, usually in the act of being captured. Phase III Moche stirrup spout bottles with fineline painting indicate the *impending capture* of the deer by their backward glance (Donnan and McClelland 1999: Figs. 3.17, 3.18, 3.19); this action is paralleled in the defeat of humans or warriors (ibid.: Figs. 3.20, 3.48, 3.50). Donnan cites the symbolic connection in Moche iconography between the hunting of deer and the battles between Moche warriors (1997). Such battles in the early Moche society may have provided the chosen sacrificial victims for the Mountain Sacrifice ceremony (Bourget n.d.). The backward glance in Phase III Moche iconography thus appears to reference 1) the defeated victims and their impending capture, and 2) their sacrifice in a mountain setting. The Moche visual repertoire would thus substantiate the interpretation posited here for the Cupisnique scenes.

That the Cupisnique feline-cactus motif references capture and sacrifice as its fundamental symbolic concepts (if not the overarching meaning) may be supported by variations of the theme. For example, a number of feline-cactus bottles include incised isolated heads on the body chamber, in addition to the net design examples (Fig. 5.5). Another striking bottle presents an individual with hands tied behind the back (Schjellerup 1995: Fig. 4-9). An incised isolated human head appears directly above this captive figure. The remainder of the bottle illustrates cacti and stepped volutes, referencing the possible mountain setting. Therefore, the feline-cactus theme associates with concepts of impending capture and sacrifice, which persist on the north coast.

Avian features: Although less common than other elements among the feline-cactus scenes, a number of Classic Cupisnique bottles illustrate avian features. These avian features are important as they associate with composite beings in Late Cupisnique and Chavín iconography and may provide the conceptual link between the programs. In one instance, a stylized avian form appears modeled on two sides of the bottle chamber (Bonavia 1994: Fig. 224; also Sharon 2000: Fig. 17). The profile face closely resembles the incised isolated heads; however, the image has an appended raptorial beak. The surrounding forms include stepped volutes and cacti pertaining to the feline-cactus theme.

The isolated head with appended beak closely resembles the design of many composite figures in Late Cupisnique and Chavín sculptural iconography. In such cases, the raptorial beak is added to a fanged face ‘like a mask’ (Rowe 1962). Notably, the avian beak is placed in identical manner as the spider chelicerae. As symbols of capture, the avian beak and spider chelicerae are the most identifiable features of these two predators. The symbolism of these two features, in fact, is so strong that they could be interwoven, as in the polychrome mural recently uncovered at the Cupisnique monumental site of Collúd in the Lambayeque Valley (Fig. 5.11). The impressive mural exhibits profile faces in a hexagonal net design. Applied to the mouth is the top half of an avian beak with cere. Half a spider chelicerae composes the bottom portion. The net design, avian beak and spider chelicerae are combined as an unequivocal reference to capture. Although avian figures are more prominent in Late Cupisnique and Chavín styles (Burger 1992), these examples highlight their symbolic inclusion in Classic Cupisnique iconography. They occur alongside the more prominent feline-cactus imagery and the Spider Decapitators.

### 5.1.2 Decapitation Theme

Decapitator figures in Cupisnique iconography were first addressed by Lucy Salazar-Burger and Richard Burger in 1983 based on a small corpus of seven stone bowls

and cups compiled from various private and museum collections (Fig. 5.12-5.16). The authors identify the central motif on four of these bowls as composite figures that they termed collectively as Spider Decapitators. The figures generally hold an isolated head in the right hand. Other isolated heads may be scattered over the body or compiled on the back in a net design. Occasionally, a rectangular object held in the left hand suggests a ritual implement. The authors thus posit the role of these figures as *decapitators*. Following their research, Cordy-Collins identifies additional figures in Formative Period iconography as decapitators, noting the prolific role of severed or isolated heads in the corpus. As I discuss below, these interwoven images, motifs and scenes comprise what may be termed a *Decapitation Theme*.

Spider Decapitators: Although the Spider Decapitator figures vary in presentation, Salazar-Burger and Burger (1983) note specific features across the representations that suggest the primacy of spider elements. These elements consist of pincers (chelicerae) applied to the main face and insect-like legs placed in X-format – or towards the four corners of the design (Fig. 5.12-5.16). The Dumbarton Oaks Plate provides the most noteworthy example, with four spider legs opposing two human appendages (Fig. 5.12). Salazar-Burger and Burger further identify the scroll over the nose as the pedipalp, or male reproductive organ, and the agnathic face at the base as the spinneret (1983).

The authors further refer to more naturalized illustrations on the Larco Plate and Dumbarton Oaks cup to support their identification of the spiders (Fig. 5.13; *ibid.*: Fig. 3-6). They surmise, in line with Lavallée for the Moche, that the spiders represent *Mygalia* sp., a genus of burrow-dwelling wolf spiders including Tarantulas. More generally, they note the appearance of spiders in the Andes during rains to posit the visual allusion to concepts of fertility. In this regard, the authors note the representation of a *Strombus* shell on the Brooklyn Plate figure (Fig. 5.14). The location of the shell between the legs and the serpent extending from it appear phallic in nature, perhaps referencing fertility.

Salazar-Burger and Burger conclude this foundational study in part by citing comparative stylistic features of the Spider Decapitators with the monumental programs of Cerro Sechín, Garagay, and Chavín de Huántar (1983). Such features include the nose scroll (pedipalp), net design, agnathic mouths, and isolated heads (compare Fig. 1.17-1.18, 1.21). These elements evince the spatial pervasiveness of the symbolic visual program. Based on the iconographic comparisons, the authors surmise that the spider images predate the florescence of Chavín style, suggesting a late Middle Formative (1200-800 BCE) temporal position (2000). They conclude by positing the role of spiders in north coast iconography as symbols of fertility and rains, alongside the ritual context of spiders as hunters and *captors of live prey* – or sacrificial victims.

Decapitation Theme: In 1992, Cordy-Collins elaborates on the decapitator images to offer the first thematic analysis of these Cupisnique images. She focuses attention on the Limoncarro Cup, a stone vessel that derives its name from a site in the lower Jequetepeque Valley (Salazar-Burger and Burger 1983). The stone vase illustrates two Spider Decapitators (Fig. 5.15). The figures hold in the right hand isolated heads, which are modeled as tubers with stems terminating in avian heads. The base of the cup displays a similar avian form. One of the spider decapitators bears a single, frontal isolated head on its back, encased in a gourd-shape element extending from the eye. The other spider figure boasts multiple heads in a net design in the same position, near identical to the Dumbarton Oaks Plate (compare Fig. 5.12 and 5.15). The Limoncarro Cup reinforces the spider decapitator motif in Cupisnique iconography, and it evinces a complex set of visual metaphors. When represented in isolation, these visual metaphors may refer back to their association with the decapitator figures, thus encoding a thematic image set.

The first notable metaphor drawn from the spider decapitator representations is the isolated heads symbolically represented as tubers. As Cordy-Collins notes (1992a), a number of Classic Cupisnique bottles depict modeled tubers, identified as manioc

(*Manihot esculenta*) or *yuca de caballo* (*Proboscidea altheaefolia*) (Elera 1998). The ceramic tubers regularly host multiple incised isolated human heads (Fig. 5.120-5.121). As such, the bottles appear to reference the decapitation theme, emphasizing a metaphor between human heads and root plants. Cordy-Collins suggests that the root plant metaphor denotes the human heads as ‘something to be harvested’ (1992a: 212). Yuca plants grow and sustain underground and are propagated through stem cuttings, elements which may have been symbolic in their association with severed heads.

By identifying the plant as *yuca de caballo*, Elera alludes to an association of liquid nourishment. The *yuca de caballo* is a root plant of the Martyniaceae family that was identified by Elera in the edge of the Cupisnique gorge. According to the biological study (Elera 1998: Appendix 1), the root is non-toxic and provides a sweet juice that horses and cattle will dig up from twenty to fifty (20-50) centimeters underground for nourishment. The *yuca de caballo* apparently goes dormant for part of the year and emerges during the Andean rainy season, around the March equinox. The metaphor created between the root plants held as isolated heads in these scenes may then supports the dual symbolism cited for the spider – as hunter/captor associated with agrarian production.

In contrast with other decapitator figures, Cordy-Collins notes a second metaphoric connection surrounding the spider decapitators of the Limoncarro Cup and Dumbarton Oaks Plate: the containment of isolated heads within a net design (1992; Fig. 5.12, 5.15). She posits that the net design symbolically corresponds to the spider web as a natural feature of capture (ibid.). A set of Classic Cupisnique stirrup spout bottles boasts isolated heads incised within an interlaced pattern – or net design – comprising the globular body (Fig. 5.17).<sup>7</sup> The reference to a netted gourd in the design of the bottles is reinforced by the gourd shape illustrated on the spider forms.

By addressing the modeled tuber and net-design bottles, both with isolated heads, in connection with the Spider Decapitator scenes, Cordy-Collins applies the thematic



approach to this representational program. The thematic correspondences substantiate a Classic Cupisnique temporal placement of these largely unprovenanced carved stone vessels, which is reinforced by independent stylistic analyses of the Spider Decapitators (Bischof 2000). The metaphoric associations between such elements – tubers and heads, nets and webs – clearly permeate Classic Cupisnique iconography. They also imply the development of complex symbolic correspondences between the local ecology and the social realm, such as a web spun by a spider and a net woven by an individual. The term ‘decapitation theme’ thus encompasses such prominent spider images, the ubiquitous isolated human heads, and their complex natural/cultural metaphors.

Spider Identification and Ritual Ecology: In 2003, Walter Alva presented a paper by Ignacio Alva Meneses at the Fourth D. J. Sibley Conference, which focused on Moche Art and Archaeology. In the paper, Néstor Ignacio Alva Meneses posits the species identification and meaning of the spider in Moche iconography, which appears prominently in the burial regalia of Tombs 1 and 3 at Sipán. Alva Meneses identifies the spider as *Argiope argentata*, a species of orb-weavers that flourish in fertile conditions on the north coast (Fig. 5.18).

Alva Meneses bases the visual identification of *Argiope argentata* on 1) the general shape of the spider abdomen, 2) the banded legs of the spider, and 3) their consistent arrangement in an X-pattern at the center of the web (Fig. 5.18). Regarding the meaning of chosen species, Alva notes a number of symbolic elements. These include a) the presence of these spiders in great numbers during El Niño conditions on the north coast, b) the dual coloration – gold and silver – within the species, and c) their manner of capturing and digesting live prey (Alva Meneses 2008). Recently, Bourget (n.d.) extends on this species identification in Moche iconography, solidifying its symbolic importance in relation to Moche human sacrifice.

Although Alva Meneses focuses on the Sipán tomb materials and Moche iconography, he ventures an identification of the spider images in Cupisnique visual culture. Alva Meneses postulates that the Cupisnique spiders likewise refer to the *Argiope* sp.; however, he remains less specific in his identification. The banded legs in X-format and the net design in the Cupisnique vessels seemingly refer to the *Argiope* sp., possibly the same *A. argentata*. Yet Alva Meneses suggests that the striped body of the spider in certain Cupisnique representations may instead refer to the highland species *Argiope trifsciata* (2008: Fig. 14.10). I largely agree with these spider identifications, and suggest that both species may be referenced in Cupisnique iconography, with preference for the coastal *A. argentata*.

The spider decapitators in Cupisnique iconography have banded legs, often set in an X-pattern (Fig. 5.12-5.15). They are also rendered with other elements set in this X-shape manner, such as tri-part floral elements or zigzag mouth bands. The base of the spiders may be illustrated as an agnathic face, with three prominent fangs (Fig. 5.12). Salazar-Burger and Burger identify these agnathic mouths as symbolic of the spider spinneret (1983). While plausible, the large agnathic faces with fangs may also allude to the multi-lobed abdomen of *A. argentata* (compare Fig. 5.12 and 5.18). The crisscrossed mouth bands on the Polí Plate likewise may refer to the stabilimenta of *A. argentata* (Salazar-Burger and Burger 1983: Fig. 14). Such stabilimenta, which may serve to attract prey, appear in a similar X-shape manner with zigzag pattern. The spider often rests face down in the web center, its legs mimicking the stabilimenta X-design. Recently, Bourget has argued that such X-shape layout and zigzag stabilimenta occur predominately in Moche iconography, in relation to human sacrifice (n.d.). The iconographic emphases within the Spider Decapitator scenes on: 1) the agnathic mouth at the base with its prominent extensions and 2) the X-pattern layout of legs and rope patterns thus support the species identification of *Argiope argentata*.<sup>8</sup>

In contrast to *A. argentata*, *A. trifasciata* has an oblong abdomen, which is rounded at its extremity and horizontally striped (Alva Meneses 2008: Fig. 14.10). The legs are similarly banded as *A. argentata*; however, *A. trifasciata* does not often create the X-pattern stabilimenta in its web. *A. trifasciata* may be the species referred to by certain Cupisnique spider representations, such as the Larco Plate and Dumbarton Oaks Cup, based on the striped body (Fig. 5.15). These stone vessels, without secure provenance (Salazar-Burger and Burger 1983), illustrate the spiders in naturalized form and not as decapitators. They are strikingly similar to the example recovered from San Pablo, in the highlands around Kuntur Wasi (ibid.; Fig 5.16). The spider representations thus may refer to the symbolism of the spider in Cupisnique iconography but utilize a highland relative to the *A. argentata* of the coast. The highland *A. trifasciata* still carries the symbolism of banded legs and web creation, metaphoric of a net. Yet the symbolic potency of the X-design and zigzag stabilimenta of *A. argentata* may have not extended into dryer highland environments.

Regional and Temporal Extension: As Salazar and Burger suggest (2000), the spider images may have greater symbolic relevance to the coast – its local ecology and net-based fishing industry. Yet spiders in Formative Period iconography boast a broad spatial distribution, concentrated on the coast but extending into the highlands. Carved stone vessels have been recovered at Limoncarro (Lambayeque Valley) and San Pablo (Jequetepeque River) (Salazar-Burger and Burger 1983), as well as Pacopampa (Chota Region) (Rosas and Shady 1970: Fig. 15c) (Map 2). Carved petroglyph and stucco images of spiders appear at Alto de las Guitarras between the Moche and Virú Valleys, and possibly at Garagay in the Rimac Valley (Salazar-Burger and Burger 1983). Spider chelicerae further occur on sculptures from Cerro Sechín (Tello 1956: Fig. 103) and on post-occupation graffiti at Sechín Bajo (Fuchs 2006: Fig. 13). Given the close visual parallels in the design of the Spider Decapitators to the sculptural tradition from Cerro

Sechín (pillbox hat, stepped club; chevron elements), the presence of spider chelicerae in this region is not surprising, and it forces consideration of the regional extent and development of this subject, concept, and theme.

Finally, spider decapitators maintain symbolic efficacy into Early Intermediate iconography of the Moche culture, illustrated on the façade of Huaca de la Luna (Moche Valley) and in metal artifacts from Sipán and Loma Negra (Alva Meneses 2008; Bourget n.d.; Jones 2001). The spider decapitator images in Moche iconography notably maintain certain affiliation with the preceding Cupisnique forms. For example, the spider decapitators on the north façade of Huaca de la Luna bear the similar X-design of the legs, chelicerae, and pillbox hat of the Cupisnique stone bowl figures (compare Fig. 5.12, 5.19). In both Moche and Cupisnique iconography, however, spider figures are a predominant, but not the only, supernatural decapitators.

Non-spider Decapitators: In her thematic study, Cordy-Collins identified Cupisnique decapitator figures bearing similar design to the composite spider images (Cordy-Collins 1992a: Fig. 3-5). They occur on stone cups or bowls, as well as bone or shell implements.<sup>9</sup> The supernatural forms boast anthropomorphic features, which are sometimes divided axially with animal features (Salazar-Burger and Burger 1983, 2000) (Fig. 5.20). A set of shared traits occurs generally across the decapitator figures. These include the bearing of an isolated head in the right hand,<sup>10</sup> the presence of a ‘pillbox hat,’ and an X-design composed by the legs, mouth-band designs, or tri-part floral elements extending toward the four corners of the visual field. The layout in an X-format appears to be significant to these decapitator images (Fig. 5.12-5.15, 5.20), which design likely refers back to the spider, as the preeminent decapitator.

Although it does not exhibit the X-format of the spider decapitators, the Rondón cup illustrates a profile anthropomorphic figure, with avian raptorial beak and tail

feathers (Fig. 5.21). It bears in the right hand an isolated head, suggesting its role as an avian decapitator. Raptorial birds are common and prominent in Late Formative Period ceramics and iconography (see below). The increased prominence of raptorial birds may have spurred the cross-comparative manner of representing avian beaks and spider chelicerae as affixed ‘masks.’ Both chelicerae and beaks serve as prominent symbols of *capture*. As mentioned above, their association is spelled out in the polychrome mural at the site of Collúd (Lambayeque Valley) (Fig. 5.11). The three main types of Cupisnique decapitators thus are spider, avian, and anthropomorphic forms.<sup>11</sup>

## 5.2 Symbolic Dualities

Within the Cupisnique ceramic corpus, there are two distinct visual programs that appear to illustrate the concept of symbolic duality. These are 1) the pairing of *Strombus* and *Spondylus* shells and 2) the contrast of dual eye forms on represented faces. Following the feline-cactus and decapitator themes, these visualized symbolic dualities are the most common representations in the iconography. These visual dualities appear extensively in the monumental centers at Kuntur Wasi and Chavín de Huántar. Therefore, I present these contexts in detail following a discussion of the ceramic corpus.

### 5.2.1 *Strombus* and *Spondylus* Dyad

The two marine shells, *Strombus* sp. and *Spondylus* sp., are remarkable elements in Cupisnique iconography, archaeology and studies of regional trade. In nature, the shells pertain to the warm tropical marine waters off Ecuador, north of the cold Humboldt Current. The large mollusks would have had to be imported into Peru south of the Gulf of Guayaquil.<sup>12</sup> The *Strombus galeatus* is a large univalve mollusk whose mature shell bears a white coloration (ex. Fig. 1.22). It may weigh up to two kilograms, making

transportation challenging (Keen 1971). The *Spondylus* sp. is a group of bivalve mollusks that may bear spikes and range from pink to red to purple (Fig. 5.22). The shell species are obtained from depths up to thirty meters off the coastline, thus implying a set of skilled divers for their pre-modern collection (Elera 1998; Paulsen 1974; Pillsbury 1996).

In the pre-Columbian Andes, the large marine shells first appear together in a burial at Real Alto in Ecuador around 3300 BCE, with the *Strombus* modified as a trumpet (Marcos 2002). In Peru, the two shells occur in modified forms, such as pendants and beads, at pre-ceramic and early Middle Formative sites, including Aspero and La Galgada (Feldman 1985, Grieder et al 1988). The first known complete *Strombus* shell trumpets, however, appear in the Peruvian archaeological record during the Middle Formative, at north coast and highland sites such as Punkurí, Kuntur Wasi, and Chavín de Huántar. In these instances, the shell trumpets – or *pututus* – occur along with intentional deposits of *Spondylus* shells, reinforcing a contextual significance of the paired shells. Coincident with these archaeological deposits, representations of the shells proliferate from the Middle to Late Formative – in Classic Cupisnique bottles and on monumental sculptures at Chavín de Huántar.

Classic Cupisnique ceramics: Illustrations of these two marine mollusks abound in Classic Cupisnique stirrup spout bottles. The univalve and bivalve shells are often juxtaposed on a single bottle (Fig. 5.23-5.25), but they may appear independently as well. While representations of the shells are common in the ceramic corpus, they have rarely been discussed in preceding scholarship of Cupisnique iconography. Salazar and Burger present a Cupisnique bottle of the paired shells in their discussion of duality in Chavín culture (2000). Toshihara similarly argues that symbolic duality pervades Cupisnique ideology through the persistent illustration of these paired marine shells (2004). In this section, I explore the possible meaning of the dual shells based on archaeological contexts and their relation to the identified themes.

The majority of known Classic Cupisnique bottles illustrating the paired shells derive from looted contexts. Similar to the feline-cactus bottles, Alva publishes a number of fine examples deriving from the Jequetepeque and Zaña Valleys (1986: Figs. 187, 188, 215, 216, 259). Another bottle is said to originate from the Cupisnique occupation at Puémape (Elera 1998: Plate 1). The spatial range of such ceramic representations thus correlates well with the other complex themes and motifs.

The majority of ceramic bottles represent the shells in relatively natural state (Fig. 5.23-5.25). Such minimal embellishment has generally directed scholarship to monumental examples to interpret this juxtaposed pair. The ceramic representations, however, do offer some crucial visual information. For example, rarely are the paired shells modeled in contrasting colors, retaining the common polished grey or brown ware (Alva 1986). They ceramic representations often vary, though, in their texture – rough *Spondylus* and smooth *Strombus* – mimicking this same contrast in the natural marine shells. As Burger suggests (1993), such textural contrast may have been a ceramic medium utilized to express duality, perhaps advancing on this perceived natural duality. The rough/smooth duality continues in Late Cupisnique and Chongoyape-style ceramics.

The Classic Cupisnique bottles further render the dual shells in a consistent arrangement. When modeled together, the spire of the *Strombus* shell faces the same direction as the hinge of the *Spondylus* bivalve (Fig. 5.23-5.25). This intentional directionality implies a symbolic sidedness to the shells. With the spire of the *Strombus* aligned toward the viewer, the ceramic bottles thus evince a duality of right: *Strombus* and left: *Spondylus*. That this was the preferred orientation of these ceramic bottles is supported by their display in the Chavín sculptural program. As described below, scenes of processing individuals present a *Strombus* bearer preceding a *Spondylus* bearer in a left profile (Fig. 5.29). The figures hold the shells with the spire or hinge closest to them. Similarly, the Smiling God grips the *Strombus* shell in the right hand and *Spondylus* in the left (Fig. 1.13), with the spire and hinge equally directed downward. These scenes

reinforce the sidedness and symbolic duality modeled within the Classic Cupisnique bottles.

The dual shell bottles also exhibit various incised designs, which visually connect the pair to the Cupisnique visual corpus. These incised designs include step elements (Fig. 5.25), isolated human heads, and concentric circles. While isolated human heads may appear between the shells or on the *Strombus* (Fig. 5.23), concentric circles occur exclusively on the *Strombus* shell (Fig. 5.24). Not surprisingly, these visual elements are frequently engraved on actual shell trumpets recovered from the monumental sites of Kuntur Wasi and Chavín de Huántar.<sup>13</sup> They thus support the corresponding symbolism and meaning of these two data sets – actual specimens and their ceramic representations.

Northern coast trumpets: From the north coast and highlands, there are only a few examples of *Strombus* trumpets. The *Pickman Strombus* is a modified shell trumpet, or *pututu*, found near the Chiclayo airbase within the Lambayeque Valley drainage (Tello 1937). The *pututu* exhibits a complex engraving, which includes an anthropomorphic figure blowing a *Strombus* shell trumpet (Fig. 1.22). The representation bears stylistic similarities to the stone sculptures at Cerro Sechín. For example, the main individual sports a simple eye stripe, a pointed loin cloth, simple oblong eyes, and a stream of parallel lines running like hair from the top of the head and down the back (compare to Fig. 1.17). The remainder of the engraving is filled with fanged faces connected by swirling extensions, similar to the designs on roughly contemporary *pututus* from Kuntur Wasi and Chavín de Huántar (Onuki 1995: Fig. 10-6; Rick 2005: Fig. 5.10).

*Strombus* shell trumpets have further been recovered *in situ* from Punkurí, along the north-central coast. At Punkurí, an engraved *pututu* was placed along with a pair of *Spondylus* shells in a votive burial chamber during a Middle Formative construction phase (Tello 1943, Burger 1992: 89).<sup>14</sup> The chamber was located at the foot of the main



staircase, under the gaze of a modeled polychrome feline clay sculpture. According to Tello, the individual was decapitated and female (1943: 137), a likely significant ideological statement in this context and with the associated deposited objects. Along with the *Strombus* trumpet and *Spondylus* shells, a finely carved stone mortar and pestle were placed at her side. A similar stone mortar from the coast displays two stylized figures around the vessel body (Burger 1992: Fig. 71). The individuals exhibit two different eye forms; one is quadrangular while the other has two lines extending upward. These images perhaps present an early manifestation of the dual-eye motif (see below). As at Kuntur Wasi, the dual-eye motif thus appears in such monumental instances as the dual marine mollusks.

Kuntur Wasi: At Kuntur Wasi, the two marine mollusks – *Strombus* and *Spondylus* – occur separately in two high-status tombs located in the central platform of the monumental center (Kato 1993; Onuki 1997). Of the eight high-status tombs excavated at this highland site, the shells bear out a symbolic contrast between two adjacent tombs – Tomb 1 and Tomb 4. These tombs were situated on the north end of the central platform. In both burials, the individuals were oriented with their head toward the north. This orientation was intentional, since Tombs 2 and 3 in the same platform had different orientations to the northeast and west respectively. Tomb 1 and Tomb 4 thus may have been intentionally buried in this central location as a symbolic pair.

Tomb 1 contained a *male* individual of fifty to sixty years of age, buried with green stone earplugs and a gold crown (ibid.). The cylindrical crown depicts isolated frontal human heads in a hexagonal net-like pattern (Fig. 5.26), recalling the decapitation theme. The burial also contained noteworthy red-on-orange ceramic bottles; one vessel illustrates a supernatural crested bird (while the other exhibits prominent concentric circle designs (Onuki 1995: Lam 11-4, 5). Finally, the male individual had with him three *pututus*, or *Strombus* shell trumpets. Despite his disturbed remains, the shells appear to

have been intentionally placed together along his right side. The central trumpet was finely incised with interlocking faces and animal elements, similar to designs on numerous Cupisnique ceramics (ibid.: Lam 10-6).

In contrast to the male individual in Tomb 1, Tomb 4 contained the body of a *female* of more than sixty years of age. She had a few gold objects, including a necklace of avian figures. A small stone vessel was sculpted in the manner of a human head. The ceramic objects included one Late Cupisnique style stirrup spout bottle. The most notable components of the tomb, however, were the numerous beads of lapis lazuli, green stone, and *Spondylus* shell. The beads totaled nearly 2.5 kg in weight (Kato 1993: 223), and more than sixty-eight percent were of *Spondylus* shell. These two burials contexts thus evince the crucial symbolic association of the female individual with the red marine *Spondylus* shells, and the male with the white *Strombus* shells.

These high-status tombs at Kuntur Wasi presumably date to the start of the Kuntur Wasi phase, or roughly 800 BCE (Onuki 1997). According to the ceramic chronology, the Kuntur Wasi phase relatively postdates the Classic Cupisnique phase. The site investigators thus perceive these high-status tombs as coastal intrusions beginning at the start of the Kuntur Wasi phase (Onuki 1997). Yet Cupisnique influence is already present during the preceding Idolo phase (1100-800 BCE), extending into the Cajamarca basin during the contemporary Late Huacaloma Phase (1000-550 BCE) (Terada and Onuki 1985). The high-status burials thus evince the use of this established Cupisnique symbolic duality. Placed side by side in the Central Platform, Tomb 1 and Tomb 4 evince the duality male: east: *Strombus*: right to female: west: *Spondylus*: left.

Like the north coast *Pickman Strombus*, the three *Strombus* shells recovered from Tomb 1 at Kuntur Wasi also functioned as *pututus*. Tomb 1, however, further contained pendants and beads made from *Strombus* shell (Kato 1993; Onuki 1997). The *Spondylus* shells of Tomb 4 were all formed into beads. Such modifications accord well with the observed penchant in Cupisnique culture for objects of personal adornment (Burger 1992:

97; Larco 1941). The modified shells further suggest that their symbolic import was not limited to their shape but also to their color, which is retained through alterations to the shell. The sculptures of the Central Plaza at Kuntur Wasi contrast white and red stones across the northeast-southwest axis (Onuki 1995), supporting this possible color difference in the dual shells – the white *Strombus* and red *Spondylus*.<sup>15</sup>

Chavín de Huántar: Undoubtedly, the paired marine mollusks have most often been examined through their monumental presentation at Chavín de Huántar. The shells appear in various contexts at Chavín de Huántar: 1) in the sculptural program, 2) on non-local ceramics deposited in the Gallery of the Offerings, and 3) as actual specimens placed in the galleries and caches throughout the monumental center. The *Strombus* and *Spondylus* dyads compare well to the preceding Cupisnique and highland examples.

Cordy-Collins was the first to address the *Strombus* and *Spondylus* dyad in the Chavín sculptural program by discussing the New Temple Plaza ashlar commonly known as the ‘Smiling God’ (1979). The Smiling God illustrates an anthropomorphic figure that faces frontally with fangs, serpent hair, and pendant quadrangular eyes (Fig. 1.13). The individual bears a *Strombus* shell in the right hand and a *Spondylus* shell in the left. Scholars have interpreted this handedness as symbolic of male and female qualities respectively (Burger 1992: 174; Cordy-Collins 1979).<sup>16</sup> The duality within the Smiling God sculpture thus reads *Strombus*:right:male versus *Spondylus*:left:female, similar to the duality manifested by the tombs at Kuntur Wasi.

As noted in the previous section, Salazar-Burger and Burger reinforce a gendered reading of the shells by citing the phallic location of the *Strombus* shell on the Spider Decapitator (1983; Fig. 5.14). The Tello Obelisk presents an animate *Strombus* shell in a similarly phallic location on one of the paired Great Images (Lathrap 1973) (Fig. 1.8). The *Spondylus* shell also appears in animate form on the Tello Obelisk, reinforcing the

symbolic dyad (Burger 1992, Burger and Salazar-Burger 1993; Lyon 1978). Such scholarship at Chavín de Huántar thus enriches the duality interpretation of the mollusks.

The symbolic import of the shells at Chavín de Huántar, however, does not simply reside in their strict pairing but also in their apparent performative use at the ceremonial center. The excavations in 1972 by Luis G. Lumbreras in the Circular Plaza uncovered a stone ashlar on the upper row that illustrates a profile anthropomorphic figure in ritual attire blowing a *Strombus* shell trumpet (Fig. 5.27). This ashlar is one of an identical pair, which is succeeded to the northeast by a pair of similarly attired profile figures (Fig. 5.28). While the images are heavily eroded, and thus resist confident identification, Lumbreras posits that the figures likely bore *Spondylus* shells (2007), a conclusion I also reached independently. As I did, Lumbreras likely founds this identification on comparison with a recently discovered cornice stone from the western face of the monumental structure.

The Stanford excavations recently uncovered the second portion of a cornice illustrating processing anthropomorphic figures on two adjacent faces (2004). The newly unearthed first half exhibits a ritually attired anthropomorphic figure blowing a *Strombus* shell trumpet while the succeeding section illustrates a similar individual bearing a *Spondylus* shell (Fig. 5.29). These two sculptural programs, the western cornice and eastern Circular Plaza ashlar, thus evince a performative role for the two marine mollusks. Although the sculptures may represent strictly mythical events, such processions with these ritual objects were perhaps physically reenacted at the monumental center. This presumption is substantiated by the materials excavated in the galleries immediately flanking the Circular Plaza.

In 2001, John Rick uncovered remains of over twenty *Strombus* shells from the Gallery of the Snails (2005). The *Strombus* shells had been modified to form trumpets, by sawing off the spire and by creating a functional hand grip (VanValkenburgh n.d.). The evidence of extensive wear on many of these trumpets suggests repeated use in ritual

performance. While the handgrips appear to reflect local modification of a consistent few types (ibid.), the decorations engraved on the shells indicate non-local styles, comparative with north coast and highland iconography (ibid.). The *pututus* at Chavín de Huántar thus may represent an imported compilation of Cupisnique shell trumpets. Notably, the consistent natural spiral of the *Strombus* shell is counter-clockwise when the spire faces toward the observer. This forces a right-handed grip of the *pututu* for its performance as a trumpet. This natural right-sided handgrip of the *pututu* greatly substantiates the chosen handedness of the dual shells in the Cupisnique and Chavín visual traditions.<sup>17</sup>

In the repertoire of materials excavated from or associated with Chavín de Huántar, there are two pieces worth addressing briefly before closing this section. Through his investigations of the Gallery of the Offerings, Luis Lumbreras recovered a black-and-red ceramic vessel (2007: Fig. 188, Sp 487). The ceramic contrasts frames of relief black *Spondylus* shells on a red background with red *Strombus* shells on a black background. The frames are distinguished by inverted stepped volute designs enclosing the *Strombus* shells. In contrast to the Classic Cupisnique bottles addressed above, the Gallery of the Offerings piece 1) utilizes two colors – red and black – to differentiate visually the dual shells, 2) presents multiple shells on the same vessel, 3) animates the *Strombus* shells with serpents, and 4) includes the stepped volute in the design. Nevertheless, the vessel clearly provides a ceramic example of the dual shells from this highland center.

The other significant artifact is a gold spoon that is said to derive from Chavín de Huántar (Lothrop 1951; Fig. 5.30). The spoon is the only known Formative Period metal object to combine gold and silver, in contrasting dual coloration. The narrow spoon probably served for fine substances, such as hallucinogenic snuff. The handle, however, was extensively modeled to portray an anthropomorphic figure with a top-knot hairdo. The figure holds a *Strombus* shell to the mouth as if blowing a trumpet. In contrast to the golden spoon, the *Strombus* shell is rendered in silver, recalling its natural white

coloration. The figure sits on a cylindrical drum with a braided net design. Underneath the drum – visible to anyone imbibing from the spoon – is an isolated human head. The back of the figure boasts an embossed avian head. The central individual with its top-knot hairdo may relate to a set of ritual actors illustrated in Chavín and Cupisnique iconography (Fig. 5.46, 5.52-5.53). This small artifact thus visually combines symbolic referents to capture (net and avian), decapitation (isolated head) and dual coloration (gold and silver) with the performative use of a *Strombus* shell trumpet.

The *Strombus* shell was clearly important for the sound it could produce as a trumpet. Under good acoustic conditions, the sound of a *pututu* may resonate across large expanses of territory. It was of undoubted practical and ritual use in highland sites such as Kuntur Wasi and Chavín de Huántar. The production of *pututus*, in fact, persisted throughout up through the time of Inca *chaskis* (Murra 1956). The *Spondylus* shell also boasts an extensive history of symbolic use, with the precious *mullu* imported by the Inca royalty (Pillsbury 1996, Paulson 1974). The longstanding importance of the shells certainly owes to concepts founded in the Formative Period. Through their early importation into Peru, the two shells came to manifest a symbolic duality of critical importance in Classic Cupisnique and Chavín iconography. Their size and acquisition serve as perpetual reference to the warm tropical waters to the north in Ecuador. The established symbolism of such shells perpetuated through Andean pre-history.

### 5.2.2 Dual-eye Motif

In comparison with the above visual programs, the dual-eye motif has received the least scholarly attention. Larco Hoyle (1941) and Richard Burger (1992) have addressed a known ceramic representation while investigators at Kuntur Wasi have noted this motif in numerous sculptures and burial goods at the highland monumental center

(Kato 1993; Onuki 1997). I include the dual-eye program here based not on extensive previous research but rather on the identified regional pervasiveness of this motif.

Cupisnique Ceramics: The dual-eye motif appears most recognizably on a Classic Cupisnique stirrup spout bottle reportedly from Salamanca and currently in the Larco Museum (Fig. 5.31; Cat. ML040218A; Burger 1992: Fig. 83; Larco 1941: Fig 212-214). Formally speaking, the finely polished monochrome bottle presents a head with two halves of juxtaposed faces. One facial half boasts a rounded eye extended over by a serpent while the other half hosts a quadrangular pendant eye. Based on his conviction about a Cupisnique feline cult, Larco posited that the bottle portrays two ‘aspects’ of the feline: the natural and the stylized forms (1941: 150). In subtle contrast, Burger suggests that the two faces juxtapose that of a feline and a human (1992: 96). In other words, he posits that the vessel represents the transformation from human to feline, aligning the scene with concepts cited for the feline-cactus program. Elera supports this reading (1998: 285), and he adds that the serpent emerging from the mouth of the left face may recall the mucus of certain Chavín de Huántar tenoned heads, also said to symbolize transformation from human to animal forms. Based on the current corpus, I would posit that the dual eye motif presents a conceptual symbolic dyad, which appears to be more complex than simply human and feline, or natural and supernatural.

The dual eye forms are represented on at least four other Classic Cupisnique stirrup spout bottles, a contemporary jar, and a Chongoyape-style stirrup spout bottle (Fig. 5.32-5.35). None of the vessels exhibit contrasts in color or surface texture across the divided face or between the two opposing faces. Most bottles feature a high polish texture with occasional pigment in the incisions. The quadrangular eye is the most consistent feature of the dual-eye motif. Framed on three sides, the iris is always pendant from the top lid, which may or may not protrude outward. This squared eye appears on non-natural modeled faces and composite figures in Cupisnique and Chavín iconography.

None of the naturally modeled anthropomorphic or animal figures feature this eye design, distinguishing it from other common types such as the almond-shaped, bulbous, or ‘winged’ eyes of anthropomorphic and feline figures (compare with Fig. 5.1-5.8).

Previous scholarship has identified the quadrangular eye as pertaining to the feline form (Cordy-Collins 1996). The quadrangular eye type certainly shares the pendant iris feature with the ‘winged’ feline eyes (ex. Fig. 5.8); however, the monumental and portable art of the north coast and highlands provide no known example of fully rendered felines or feline heads with the quadrangular eye form. The quadrangular shape, in fact, may derive not from feline eyes but rather from modes of signifying supernatural or ancient qualities. For example, pendant eyes with rectilinear top lids appear on the Cerro Sechín ‘warriors’ and north coast decapitator figures (Fig. 1.17, 5.12), and they come to be rendered on the Smiling God at Chavín de Huántar (Fig. 1.13). These sculptures all exhibit figures with anthropomorphic qualities combined with other features to create composite forms – supernatural individuals.

In this regard, an interesting ceramic combines a feline-cactus scene with the double-eye motif (Lavalle and Lang 1981: 109; Fig. 5.35). The feline appears on four sides of the vessel. All four felines have concentric circle spots, bands at the ankles, ‘winged’ eyes, and a backward glance. Their gaze directs over the right shoulder (two felines) or the left, given their opposing directions. In each instance, they look back to a quadrangular pendant eye incised near the feline head. The feline and the quadrangular eye on the four sides thus comprise dual eye motifs. The four scenes are separated by a vertical column ending in a volute, connecting the images to the feline-cactus scenes. Finally, an incised net pattern appears behind the feline forms and quadrangular eyes. The ceramic thus combines the backward glance and net design – references to *impending capture* and *capture* respectively – with a dual eye motif.

In contrast to the quadrangular eye, the opposing eye, head crests, and facial features of these dual-eye motifs vary across the ceramic examples. Of the five known



Classic Cupisnique stirrup spout bottles, the arrangement may vary from two complete faces illustrated on opposing sides of the vessel, or two facial halves juxtaposed (Fig. 5.31-5.32), to two different eye types contrasted on a single frontal face (Fig. 5.33-5.34). When represented on the same side, the heads are often framed with crests, and in three cases, an object extends from the mouth. In one instance, the object appears to be a serpent head (Fig. 5.31); in another, a square peg or whistle (K 2000: Fig. 51); and finally, a multi-part streamer (Fig. 5.33). The latter recalls the design of the monumental representation of the dual eye motif – Monolith 1 at Kuntur Wasi (Fig. 1.23). It thus supports the close temporal relationship between this sculpture and the Classic Cupisnique ceramics.

The eye type opposing the quadrangular form may range from a more natural almond-shape to a round eye encircled by a serpent element. The latter type is the most common form contrasted with the quadrangular eye, and thus perhaps boasts the greatest symbolic meaning. The serpent element often encircles the eye and then extends up or outward across the face (Fig 5.32, 1.23). Based on the current sample, I do not perceive a chronological development to the eye types selected to create this duality. The stylized design of the early Middle Formative Punkurí stone mortar and the Late Formative Chongoyape stirrup spout bottle argue against a neat progression from simple to complex, or natural to stylized. Nevertheless, the most prominent and popular examples of this motif in the late Middle Formative juxtapose the quadrangular eye with that hosting a serpent extension.

When paired together, the quadrangular eye type occurs on the right side of the face and the serpent form on the left (Fig. 5.31-5.36, 1.23). The consistency of these chosen sides makes clear the duality of these two features. The mouth of both sides, whether separate or shared, generally exhibits fangs, suggesting the supernatural state of both types. The crests around the head further allude to a supernatural form, as the crests occur largely on composite figures. Given the variability of such additional elements,

though, the contrasting eyes alone appear to be sufficient to present the symbolic duality. The ceramic representations of the dual eye motif, however, offer few indexes by which to extort the meaning of this symbolic dyad. The duality may be gleaned more readily from their monumental presentation, at the sites of Kuntur Wasi and Chavín de Huántar.

Kuntur Wasi: At the highland monumental center of Kuntur Wasi, the dual eye motif appears in three different contexts: 1) on Monolith 1; 2) in the Central Plaza stairway sculptures; and 3) in Tomb 2 from the Central Platform. In all three cases, the images juxtapose quadrangular pendant eyes and eyes encircled by serpents. In Tomb 2 and Monolith 1, the dual eyes occur together on one representation. On the stairway stones, they are contrasted across four axial stairway sculptures. Together, the three examples signal a symbolic arrangement to the monumental site.

*Monolith 1* was uncovered at Kuntur Wasi in 1946 (Carrion-Cachot 1948) (Fig. 1.23). Although the original location of the monument remains unclear, it currently stands at the northeast extremity of the uppermost terrace, at the top of the wide entrance staircase. The 1.8 meter tall monolith is sculpted on the two broad faces of the stone; however, sculptural elements extend around the thin lateral edges to provide a sense of continuous representation. On one side (Fig. 1.23), there is a simple face with circular eyes, nose and agnathic mouth. The rims of the eyes are in high-relief with hollowed out central pupils. The agnathic mouth presents a row of five teeth, and from the corners emerge two serpents. The individual holds a staff, which extends from the mouth down the stele to end just below the feet. There is a simple band alluding to a loin cloth, and the legs terminate in feet that are turned out and with toenails. A Classic Cupisnique stirrup spout bottle from the Museo Nacional de Arqueología Brüning de Lambayeque illustrates a nearly identical figure modeled on one stirrup of the bottle (Fig. 5.91). Another bottle illustrates just the head with similar round relief eyes (Fig. 5.92). These Classic Cupisnique bottle reinforce symbolic importance and temporal placement of this image.

The opposing side of Monolith 1 presents another anthropomorphized figure, visually more complex than the former image (Fig. 1.23). The face is surrounded by volute crests. In his taloned hands, he grips an isolated head at his chest, just above a simple loin cloth. The legs are crossed with the claws of the toes curling upward. Similar to the preceding figure, the individual wears simple anklets and wristlets. The face of the image, however, presents a large nose and fanged mouth with the corners turned down. A four-part element extends from the mouth over a collar. The face bears clearly engraved wrinkles around the nose and eyes. In accord with the ceramic representations, the dual eyes appear with the quadrangular form on the right side and a circular eye ending in a serpent head on the left. The sculptural face of Monolith 1 thus presents the dual eye symbolism alongside decapitation (head in the hands).<sup>18</sup>

Stairway Sculptures: The four stairway sculptures at Kuntur Wasi were recovered in three different events. Given the final stone that was recovered *in situ*, the four 1.4-1.8 meter long sculptures apparently served as the final step in the four radial stairways of the Central Plaza. The sculpted fanged faces may be read as two profile faces or one central face, a common technique in Cupisnique and Chavín art (Chapter 2). The first two sculptures were found during the 1946 excavations around the Central Plaza. They are carved on red stone (46-3 and 46-4; Fig. 1.24, 5.36). Sculpture 46-3 displays two quadrangular eyes while sculpture 46-4 portrays two eyes circled by serpents. In 1989, the University of Tokyo expedition encountered another stairway sculpture on the southeast side of the central plaza (Kato 1993: Fig. 15; Onuki 1995: Lam 2-6). Composed of white stone, the sculpture exhibits serpents around the eyes, identical to sculpture 46-4. Finally, in 1993 the excavations of the northwest stairwell produced the fourth and final sculpture. The sculpture was found *in situ* as the top stair, putting to rest theories that the stones once served as lintels. As expected, the final stone was white, like sculpture 89-2.

The four Central Plaza stones – two red and two white – thus contrasted across the site axes: white from northwest to southeast and red from northeast to southwest.

Contrary to expectations, however, the final sculpture exhibits the same design as 46-4 and 89-2, with serpents encircling the eyes. This means that 46-3, a red stone, presents the only quadrangular eyes of the set (compare Fig. 1.24, 5.36). This odd sculpture likely rested on the southwest stairwell, the innermost staircase leading to the Central Platform. The dual eye forms of the Central Plaza sculptures thus do not reflect the same duality as the red and white stone. Rather they present directionality to the site and possible hierarchy to the symbolic eye forms. They also lead up to the final example of the dual eye motif at Kuntur Wasi, in Tomb 2.

Tomb 2: Of the four high-status burials place in the Central Platform, Tomb 2 is the most rich in gold objects (Onuki 1998). The tomb was placed on the central axis with a northeast orientation, in line with the Central Plaza and monumental center (Fig 5.37). It contained the remains of a male individual of over sixty years of age (Kato 1993). Like Tombs 1, 3 and 4, the individual in Tomb 2 had a heavy application of cinnabar around the head, reflecting treatment found in Cupisnique burials along the coast.<sup>19</sup> The tomb contained one gold crown, a pair of gold plaques, and two gold pectorals. The latter three objects were stacked underneath the crown. Finally, there was one complete black ceramic vase and fragments of black polished ceramics with incised designs of feline faces. The only additional items of adornment were three green stone beads. The investigators note that all the objects in the tomb boast stylized feline faces (Kato 1993, Onuki 1997), providing a thematic cohesiveness to the funerary goods.

The most elaborate gold pectoral presents the most complex iconography (Fig. 5.38). The central agnathic face presents the dual eye motif; the right eye is quadrangular and the left is encircled by a serpent. Another face with almond-shaped eyes occurs immediately above the former, and it appears to host flowing eye stripes similar to those on scenes of contortionists and throat-cutting (see below). The dual eye motif of this elaborate pectoral ties the symbolic content of Tomb 2 conceptually with the Central Plaza stairway sculptures and the main stele at the site – Monolith 1.

These three contexts at Kuntur Wasi make clear the symbolic importance of the dual eye motif, as a structuring duality at the site. In the iconography, the dual eye motif is tied with representations of wrinkles and an isolated head on Monolith 1. It thus is clearly a concept embedded within the Cupisnique symbolic system. Similar to the Cupisnique ceramics, however, the consistent format of the dual-eye motif at Kuntur Wasi presents limitation toward its larger interpretation. The complex sculptural program at Chavín de Huántar thus may offer the requisite discrimination in the dual eye forms to afford levels of analysis.

Chavín de Huántar: At Chavín de Huántar, the two eye types are never directly juxtaposed on the same figure and the types vary considerably – rounding the quadrangular form, creating double snakes, inserting various and sometimes elaborate eye stripes. It is tempting to take these variations as negative evidence of this motif adopted at Chavín de Huántar, or to yield to analyses based solely on their role as markers of chronological stylistic developments (Roe 1974). The diversity of this sculptural program, however, may in fact help to evince the conceptual bases or extensions of this dual eye motif.

As mentioned above, the Lanzón image clearly boasts the eye form with encircling serpent. Given 1) the serpent extensions from the head, 2) the talons on hands and feet, and 3) the highly prestigious *in situ* central location within the Chavín monument, few scholars would deny the supernatural nature of this 4.25m tall granite representation (Fig. 1.7). The serpent eye thus associates with a supernatural form at Chavín de Huántar, a contrast to its proposed reading on Classic Cupisnique ceramic bottles (Burger 1992, Elera 1998). The serpent eye further appears on the New Temple Cornice felines (Fig 2.2), obscuring the identification of human to feline transformations.

According to Rowe (1962, 1967), the Smiling God ashlar of the New Temple Plaza succeeds the Lanzón as the monumental cult image. Similar to the Lanzón image, the *Smiling God* figure is largely anthropomorphic with serpent hair, taloned hands and feet (Fig. 1.13). Where the Lanzón figure is said to reflect the balance of opposites – upper and under worlds, east and west – through the direction of its arms and palms respectively (Burger and Salazar-Burger 1993), the Smiling God presents this concept through the dual shells, *Strombus* and *Spondylus*, in the right and left hands (ibid.; Cordy-Collins 1979). The sculptures thus seemingly exhibit similar ideas. In contrast to the Lanzón, however, the Smiling God has quadrangular eyes with pendant iris – perhaps a chronological difference or perhaps a conceptual one.

The additional site sculptures may offer some insight toward this feature. The Black and White portal sculptures, representing anthropomorphized avian figures, both host variations of the quadrangular eye (Fig. 1.9). The south portal image has a highly rectilinear form while the north eye is slightly rounded and with an eye stripe running across the face. These contrast with the lintel sculptures, which depict stylized avian figures moving in profile toward the central axis and feature a variety of rounded eye forms, with or without stripes.

In similar fashion, none of the felines of the Circular Plaza host the quadrangular eye type. The well preserved anthropomorphic figures of the upper row further exhibit either a more natural almond-shaped eye with incised brow line or pendant eyes (Fig. 5.27). While this may suggest a temporal absence of the quadrangular eye form within the Circular Plaza, I argue that it appears on a Head Bearer ashlar, which illustrates a frontal figure holding an object in the right hand (Jones 2008). As I discuss in the final section, the eroded sculpture likely represented an individual associated with the decapitation theme. The quadrangular eye would thus accord with those on coastal decapitator figures.

The tenoned heads at Chavín de Huántar provide the final and most diverse sculptural group to incorporate the various eye forms. The most natural human faces bear almond-eyes with eye brow lines (Fig. 5.39). The remaining heads combine various eye types, as well as wrinkles, top knots, nose scrolls, feather elements, and nose plugs, to create a corpus of highly diverse forms (Fig. 5.40-5.41). Similar to the Classic Cupisnique bottle from the Larco collection, the tenoned heads have been cited as evincing transformation – from human to feline (or other animal forms, including avian) (Burger 1992). The contrast at Chavín is certainly evident between almond-shaped eyes and stylized forms, the former exclusive to anthropomorphic figures and the latter to animal or composite figures. A clear distinction, however, does not appear between the quadrangular and serpent eye forms.

The tracing of the dual eye motif across these regions and monumental centers makes clear its complex – and possible developmental – use during the Middle and Late Formative Period. It suggests that the two forms, serpent eye and quadrangular eye, were both associated with supernatural figures and thus with symbolic qualities or concepts. While a concept of transformation may be implicit in the design, such transformation does not appear to be exclusively from human to feline forms. In this section, I have offered minimal interpretations of the dual-eye form, leaving the problem open for future investigations. Nevertheless, it is tempting to read the motif as contrasting concepts in Cupisnique iconography. Based on the prevalence of 1) the quadrangular eye form on supernatural decapitators, and 2) the serpent eye form on the Lanzón, it is tempting to assign the duality as: fertility (serpent eye) and sacrifice (quadrangular).

### **5.3 Anthropomorphic Figures**

Throughout the Cupisnique corpus, anthropomorphic figures occur modeled in consistent postures and with particular objects. In this section, I highlight their role as

seated individuals with ritual objects or carrying pots, as contortionists, and as captors, captives and self-sacrificers. In the final considerations, I suggest that the latter three individual types in particular may portray a ritual or ideological sequence of actions.

### 5.3.1 Deer Capture

In Classic Cupisnique stirrup spout bottles, there is only one verifiable scene of deer capture – an impressive vessel reportedly from Pampa Larga in the mid-Jequetepeque Valley and currently at the Metropolitan Museum of Art, New York (Alva 1986: Fig. 251; Fig. 5.42). The deer hunter wears a conical helmet. He has finely incised stripes running vertically across both eyes; each stripe boasts a zigzag pattern through the center. Above the simple loin cloth, the navel is clearly marked. The individual holds the deer by its legs around either side of his neck. Unlike Moche scenes, the deer has no identifiable markings – antlers, dangling tongue, or male genitalia.<sup>20</sup> Nevertheless, the scene clearly references capture, with the hunter boasting a specific helmet and eye stripes.<sup>21</sup> Similar eye stripes occur on anthropomorphic figures at Cerro Sechín and the Spider Decapitators (Fig. 1.17, 5.12). They may refer to the role as captors or sacrificers.

At least two known Chongoyape-style stirrup spout bottles reinforce this motif in Formative Period north coast iconography (Fig. 5.43; Bonavia 1994: Fig. 37). In both cases, the figures boast helmets (though not conical) and a squatting position. Although they lack the display of navels or loin cloths, the individuals exhibit items of adornment such as bracelets and earplugs, which items perhaps emphasize an acquired social status.

### 5.3.2 Human Captives

In contrast to the deer hunter, a number of Classic Cupisnique stirrup spout bottles illustrate modeled anthropomorphic figures with their hands tied behind their back



– as human captives. The individuals may be squatting, in a manner similar to the deer hunters. Or they may be seated with their forelegs tucked underneath them. The rounded upper back natural to this captive position is often exaggerated into a hunchback. None of the examples boast elaborate dress or helmets. The five vessels addressed here are relatively plain grey or red ware; the only formal contrast is between the polished and unpolished surface treatment.

The first two examples may be addressed together as they represent nearly identical figures (Fig. 5.44-5.45). The captive individuals are both rendered with prominent hunchbacks and seated on their heels. The navels are clearly marked, appearing above simple incised triangular loin cloths. The hands are tied behind the back as captives, but another rope is clearly illustrated around the neck, perhaps adding to the symbolic role. The most striking features, however, pertain to the face and head of the individuals. They boast earplugs and braided headband, and their faces are incised with parallel lines around the eyes, mouth and nose – suggesting wrinkles. These captive victims thus correlate symbolically with the diverse set of wrinkle-faced individuals illustrated in Cupisnique visual culture.

The third example is a bottle originally published by Lapiner (1976: Fig. 27; Alva 1986: Fig. 191; Fig. 5.46). The modeled individual is seated with his knees tucked into his chest and hands tied firmly behind his back. While the rope is clearly rendered around the wrists (Fig 5.47), there is no rope around the neck. In contrast to the two preceding examples, the hunched back of the individual is less pronounced and he has a top-knot hairdo, clearly drawn together from two lateral braids. Rather than boasting large earplugs, the earlobes exhibit holes, suggesting the removal of such emblems of status. The face bears no wrinkles but rather presents two different eyes – one natural and the other mutilated, with cut marks running up the forehead and down the left cheek. The ceramic figure thus appears to multiply the symbolic elements used to indicate a captive state, including mutilation and the removal of earplugs.

A ceramic bottle, currently on display in Barcelona, offers an interesting comparison to this individual (Fig. 5.48). The Classic Cupisnique style bottle is a polished brown ware with red pigmentation. It shows a modeled anthropomorphic figure with conical headdress seated with the left knee into the chest and the right knee open. The head is tilted to the left, and the tongue hangs out of the mouth. The ears exhibit round holes in the bottom lobe, indicating the removal of earplugs. Perhaps this individual – with dangling tongue – presents a state related to the captives.

The fourth example of a human captive varies from the other forms by representing the figure with his legs drawn around behind the neck (Alva 1986: Fig. 103). His hands are tied behind the back, and he bears no earplugs or loin cloth. There is an incised design of linked diamond shapes across the head. According to Alva (*ibid.*), the vessel is a polished red ware vessel that derives from the Jequetepeque valley; however, the single spout form and publication photo render unclear the placement of this ceramic within the Classic Cupisnique repertoire.

The final example has been addressed previously in the first section on the feline-cactus theme. The captive individual is modeled on a stirrup spout vessel surrounded by stepped volutes and four-ribbed cacti (Schjellerup 1995: Fig. 4-9). Above the figure is an incised isolated human head with streams extending behind. The example thus effectively connects the motif of human capture to the feline-cactus and decapitation theme.

The seated and squatting captive figures clearly highlight the importance of this symbolic concept of human capture in the iconographic system. The lack of adornments or distinctive clothing may associate with symbols of social status, especially in contrast to the wrinkle faced individuals with headbands and earplugs. These unique wrinkle-face individuals arguably tie together the captive victims with anthropomorphic figures illustrated in other actions and scenes. Such figures evince a strong significance placed on the captive state in the iconographic system, its prominence in Cupisnique ideology.

### 5.3.3 Seated Individuals holding Objects

This small group of modeled anthropomorphic figures correspond well with the victims and hunters presented above. Although a number of Classic Cupisnique bottles depict modeled figures in various seated poses, I focus here on three examples bearing a crossed-leg position with objects held in their hands. The objects are consistent across the three representations, suggesting corresponding meaning. All three stirrup spout bottles are polished grey ware vessels with no evidence of pigmentation or painting.

The first bottle represents a human figure with a simple loin cloth, head band and large ear spools (Burger 1992: Fig. 72; Fig. 5.49). Along with these features, the individual has a finely wrinkled face, which features all correspond with the two captives discussed above. In contrast to the captives, however, the seated figure is hunched forward with his hands resting on his knees. In the right hand, he grips an oblong object while his left palm is open with a round object resting in the center. He exhibits a plug in the left nostril, and intricate designs cover the right side of his body – upper arm, upper leg and back. The designs depict isolated heads linked by multi-part extensions, a motif common on Classic Cupisnique stirrup spout bottles.

The second example in this group currently resides in the Schaffhausen Museum and illustrates a nearly identical figure to the preceding bottle (Fig 5.50). The modeled anthropomorphic figure wears a simple triangular loin cloth, a headband, and large round ear spools. His face is finely incised with wrinkles around the almond-shaped eyes, long nose and pursed mouth. He grips an oblong item in the right hand and supports a round object in the upturned left palm (Fig. 5.51). Between the hands, the navel is clearly delimited. This intentional display of the navel – in both the seated figures and human captives – signals the largely naked state of the individuals, perhaps serving as a mark of

status. The paucity of more elaborate costuming, dress and accoutrements in the Formative Period visual corpus, however, does not make this distinction explicit.

The round polished objects in the left hands of these two wrinkle faced individuals may possibly refer to common round handstones found in Formative Period centers.<sup>22</sup> Elera identifies these items specifically as *chunguitos*, small polished stones encountered in Middle Formative period remains at Montegrande, Puémape, Huaca Prieta and Huaca Negra (Elera 1986, 1998; Strong and Evans 1952), and often covered in red hematite. This suggests their use in grinding the red powder, which is a consistent feature applied to the bodies of Classic Cupisnique burials (Elera 1998, Larco 1941). Given the simple round and oblong shape of the illustrated objects, however, further study and comparison with the archaeological record may eventually yield a more distinctive interpretation in relation to ritual action.

The final bottle of this selected group varies slightly from the former two representations. Along with the third example of human captives above (Fig. 5.46), to which it bears striking affinity, the ceramic bottle was first published in Lapiner (1976: fig. 2; Fig. 5.52). The anthropomorphic figure is seated with legs crossed in front and hands resting on the knees. Both hands grip an object; the right item appears to be a knife while the left article is round at the end. The individual has earplugs and a demarcated navel, similar to the two preceding seated individuals; however, he lacks a loin cloth and hair band. The hair is rather gathered up into a top-knot. Similar to the first seated figure, the individual has one nose plug; yet this time it appears in the right nostril.

While the former two seated individuals readily compare with the two wrinkle-faced human captive images (compare 5.44-5.45 and 5.49-5.50), this modeled individual bears striking similarity to the third example presented above – the captive with mutilated eye and ear spools removed. Both bottles are dark polished grey ware (in contrast to the polished brown examples). The shape of these two bottles, the design of the faces, and the top-knot hairdo suggest strong stylistic connections (compare Fig. 5.46 and 5.52). The

bottles, in fact, may recall two distinct stages in a symbolic or ritual sequence, that of the seated figure bearing a knife followed by his captive state. The same may be true for the preceding wrinkled face individuals, both as seated individuals and captives.

The top-knot hairdo is an unusual feature in Classic Cupisnique iconography, thus reinforcing the association of these ceramic representations. The hairdo, however, does compare with sculpted images at Chavín de Huántar, such as the tenoned heads (Fig. 5.39-5.40). For example, a fragmented sculpture portrays an anthropomorphic figure with a top knot hairdo and knife in the right hand (Fig. 5.53; Burger 1992: fig. 162). This sculpted individual closely recalls the Classic Cupisnique seated figure, with the top-knot hairdos and knife in the right hand. These correspondences may eventually evince a clearer understanding of such individual roles. Finally, the removal of earplugs and facial mutilation become common symbolic indicators of capture in subsequent Moche society on the north coast. This makes their identification in Cupisnique iconography valuable for comparative interpretive models.

There is one additional vessel image worth citing in this sub-section, despite its slightly aberrant pose and arrangement. Deriving from the Chicama Valley (Larco 1941: Figs. 55, 193; Fig. 5.54), the modeled anthropomorphic figure has similar facial design and earplugs as the other seated individuals. His navel and loin cloth are clearly indicated; however, he bears no headband or nose plug. His legs are tucked underneath him, similar to the human captives. Yet the left hand rests on the knee while the right forearm is now missing. The broken state of this arm suggests that the hand did not rest on the knee but rather extended from the body, perhaps once holding an object. The most notable feature of this individual is the netted bag that hangs down from the neck over the figure's back. The net bag perhaps implies the role of this figure, regarding collection. Scholars have noted that this illustrated net bag supports the reading of the interlaced isolated heads on Classic Cupisnique ceramics (Elera 1993).

#### 5.3.4 Squatting Individuals

A few Classic Cupisnique ceramics are loosely grouped here for the consistency of the figural position. They all boast a squatting pose with the knees drawn in toward the chest. Beyond this feature, their individual comportment varies; however, a number of them suggest close parallels to the captive figures and seated individuals presented above.

One modeled stirrup spout bottle, reportedly from Talambo in the Jequetepeque Valley (Alva 1986: Fig. 214; Fig. 5.55), represents a squatting anthropomorphic individual with his right hand resting on the knee. The opposing arm appears to have been broken off, suggesting that it once held a ritual object. The drawing by Alva makes explicit the male gender of this figure, as well as his naked state. Further physical markings include the common depression marking the navel center and four incised lines under each pectoral, suggesting ribs. The face is simple, with bordered eyes recalling those of the captives and seated figures. He boasts an unusual headband with a netlike pattern, but no earplugs or holes indicative of their removal. According to the published drawings (*ibid.*), his back exhibits intricate incised designs. The most striking feature of this ceramic representation is the portrayal of the genitalia and ribcage.

Another squatting individual published by Lavalle and Lang (1981: 68-69) features lines suggesting the rib cage, which are centered between graphite circles marking the pectorals and navel. The figure boasts a three-tiered conical helmet, a necklace and loin cloth, as well as intricate incised designs along the back. His right hand is held over the right eye in a gesture with unclear meaning. These images with exposed ribcages recall certain sculptures at Kuntur Wasi (Carrion-Cachot 1948: Lam XXIIb). The presentation of ribcage and genitalia further become common features in Moche iconography, on skeletal beings (Donnan and McClelland 1999: fig. 3.16, 4.78).

Another Classic Cupisnique bottle portrays two modeled individuals, which compose the base of each stirrup. Through published drawings by Alva (1986: 216a-b),

the individuals appear to host simple loin cloths and possible conical helmets. They squat, slightly hunched forward, with their hands resting on their knees. To their front, an incised isolated head appears on the upper body chamber, linking the ceramic figures to the decapitation theme. The representation of two modeled figures comprising either end of the stirrup is common in Classic Cupisnique ceramics. It accords well with the nearly universal transversal placement of the stirrup in this style.<sup>23</sup> The paired figuration occurs most often with animal and plant forms. This ceramic is the only known instance of paired anthropomorphic figures, which possibly serves as a related visual metaphor.

The squatting position was certainly a simple convention for rendering seated figures. Yet the position contrasts with the cross-legged pose in Classic Cupisnique ceramics, suggesting that it may have been intentional. As more examples emerge, these vessel images may eventually evince conceptual links between the figures rendered in this pose. That it creates a natural hunch in the back may have been one such conceptual aspect – tying together such squatting individuals with the ‘porters’ and captive victims.

#### 5.3.5 Contortionists

There are at least five known ceramic examples of anthropomorphic figures that exhibit a very unique, contorted posture. The individuals rest on their chin, chest or stomach with the legs curled behind them or completely over the top of the head – fully contorting the body. The feet may connect to the head at either the soles or the heels, creating a complete circular form. The forearms are generally bent in at the sides of the body, suggesting their use to support of the pose. Given the highly unique nature of these representations, I will describe briefly the examples and their posited interpretations.

The first stirrup spout bottle illustrates a figure with long striated hair and almond-shaped eyes, similar to certain human captives and seated individuals (Fig. 5.56). A simple ring encircles the torso, possibly implying a loin cloth. The individual does not

have any other markings or adornments, including a lack of earplugs. The second bottle, published by Lavalle and Lang (1981: 118) represents a nearly identical figure. The feet, however, curl atop the head. A third example presents a similarly contorted individual; however, in this case, he has a loin cloth clearly differentiated by its light coloration against the dark body. His hair is a simple dark coiffure set off against a light face, and he wears earplugs. Finally, one example from the Lucas Collection shows an individual on his belly, holding his ankles behind him with either hand (Donnan 1992: fig. 32).

The fourth contortionist was looted from the site of Puémapé in the Jequetepeque Valley (Elera 1993: Fig. 6; 1998: Plate 66; Fig. 5.57). Elera reports, however, that it derives from the excavated disturbed burial CXXI (1998). The individual holds a similar position as the previous examples; however, the Puémapé example rests on the chin rather than the chest. The neck is fully exposed to the ground. While his left arm is missing, the figure holds a serpent in the right hand (Elera 1993). An intricate arrangement of incised designs appears along the torso and belly, the left ankle and right arm (Fig. 5.58; Elera 1993: Fig 7; 1998: Figs. 106-108). The designs represent isolated human heads in a hexagonal net-like pattern along the torso, and isolated heads and chain designs on the ankle and wrist respectively. The face is also finely decorated, with undulating streamers extending across the eyes.

The placement and application of these facial decorations recall the eye stripes of the decapitator figures and deer hunter (compare Fig. 5.42). The flowing designs on the contortionist, however, suggest a different regional style, symbolic meaning, or both. The contortionist further is not the only Classic Cupisnique figure to bear this type of eye decoration. As Elera notes, a similar facial painting or tattooing appears on a modeled ceramic bottle that represents an individual slitting his throat (see below).

Elera offers interpretations regarding the contortionist posture, its performance and cultural extensions. For one, he cites a congenital illness known as Marfan syndrome, which results in an extreme elasticity in the tendons and ligaments (1993: 243). While the



condition may provide the physical ability to recreate the posture, Elera offers no symbolic meaning behind its presumed illustration. Furthermore, as current yoga asana practice evinces, the physical postures are accessible to individuals without such extreme congenital conditions and requiring healthy muscular strength (Fig. 5.59-5.60).

The second interpretation is more symbolic. Elera posits that the acrobatic pose may be likened to the flexibility of the *macanche*, or boa constrictor. The hexagonal pattern incised along the torso of the contorted individual would thus reference the spotted markings of the *macanche*. While a meaning behind this metaphoric comparison is unclear, I would support the visual comparison based on the consistent similarity in the modeling of serpent images. A number of stirrup spout bottles model the serpent with the neck and head resting on the base and its tail curled up over the head (Fig. 5.76).

Finally, Elera notes the relation of contortionist poses in Cupisnique iconography with those depicted in the contemporary Chorrera culture in the northern regions of modern Ecuador (ibid.). That the Cupisnique shared this iconographic element with Ecuador is plausible given the established trade in the marine mollusks and the adoption of stirrup spout bottle form, cylinder and stamp seals from this northern tropical region (see Burger 2003a). Although the examples are unprovenanced and do not afford a clear discussion regarding temporal and spatial interaction (Gartel Mann 1985: 178), they nonetheless support the prevalence of this subject in Formative Period ceramics.

In addition to the ceramic contortionist figures, I argue that a Cupisnique bone spoon from the Chicama Valley illustrates the same concept (Larco 1941: Fig. 156-158).<sup>24</sup> The represented individual, which composes the handle of the spoon, has its head flung back and legs bent at the knees so that the feet angle back behind him over the head. According to Larco, he holds a mace or spatula in the right hand (1941: 87). There are elaborate incised designs on his torso and along the back of the spoon. They depict serpents with ears, which connect to one another by bipartite extensions. Finally, the crown of the head is bifurcated, similar to the Puémapé contortionist.

The proximity of these examples – the northern Chicama Valley and southern Jequetepeque Valley – enriches their mutual identification. The Puémapa contortionist and Larco spoon both bear incised decorations on the modeled figure and represent the individual with objects in hand. That the Larco contortionist appears on a bone spoon may offer further levels of interpretation, perhaps referencing the ingestion of hallucinogenic substances in association with the contorted posture. In contrast, the incised designs on the Puémapa contortionist face clearly tie the action to the decapitation theme, which – as suggested in the following section – may present the stage following this particular posture, that of cutting the throat.

As a hypothesis, I would note that the inverted posture of the contortionists (with legs over the head) would render much more blood to the upper body, neck and head of the individual. If this contortionist pose preceded the cut throat action discussed below, as I suggest following Elera (1993), then its role might have been to enhance the effect of blood flow from the neck, exposing and opening the throat. Whatever the intent, the contortionist form was clearly symbolic and a critical part of the ideological program.

#### 5.3.6 Cut Throats

In the corpus of early north coast ceramics, I am aware of two examples that illustrate the actions of self-sacrifice – through the cutting of the throat. Currently on display at the National Museum in Lima, a well known Classic Cupisnique stirrup spout bottle is presumed to derive from Cayaltí, in the Zaña Valley (1993; Fig. 5.61). The bottle is grey ware ceramic with post-fire red pigment and graphite added to certain features. The modeled individual squats with his knees up in front. He sports a light-colored loin cloth around the base of his torso and large, round ear spools. The head is unnaturally turned around and facing upwards, with the crown of the head resting between the knees. Similar to the preceding contortionist figure from Puémapa, there is a distinct bipartition

to the head and the face is decorated with graphite markings over each eye. The eye markings run like two-part streamers from the brow to the cheeks, turning outward at the ends (Elera 1993: Fig 5; Fig. 5.62). Other highly intricate incisions decorate the back body of the individual (ibid: Fig 4; Fig. 5.63). They represent isolated heads with avian-like beaks and trefoil elements, attached to the mouth or extending in other directions. The motifs are common among Classic Cupisnique stirrup spout bottles.

The most striking feature of this ceramic bottle, however, is the action being performed. The individual, like those in the cross-legged seated posture, grips an oblong object in each hand. The item in the right hand appears to be a knife or spatula with curved blade; the object in the left is cylindrical in shape (Fig. 5.64). The hands rest to either side of the neck, which is cut open to reveal four severed arteries or veins. As Elera suggests (1993), the scene is one of self-sacrifice through cutting across the throat.

The action represented on the National Museum bottle is reinforced by another Cupisnique stirrup spout bottle (Fig. 5.65). The stirrup spout bottle is polished red ware with post-fire white pigment and graphite. The individual squats with his knees tucked in. The light-colored loin cloth, black anklets and red bracelets are set off against the dark red background. A spiraling circle denotes the navel; his arms are pulled into the chest with hands facing upward. The right hand holds an object with a bulbous end. The head of the figure is tilted back in a natural, though extreme, position over the hind quarters. The white paint on the face serves to highlight black H-shaped markings extending over each eye, as well as the earplugs. The gesture is clearly related to the preceding representation of throat-cutting and self-sacrifice.

### 5.3.7 Porters

The term ‘porters’ in this section refers to only one Classic Cupisnique modeled anthropomorphic figure (Fig. 5.66). The action, however, is reinforced by later examples

in Chongoyape style bottles. The Cupisnique bottle illustrates a squatting individual, with the knees tucked into the chest. His almond-shaped eyes, facial design, and marked pectorals closely conform to other bottles already discussed, such as the human captives and seated individuals. The figure is lightly hunched forward, with a strap pulled tight across the head and supported by his hands to either side. The strap connects to a three-tiered item, which appears to be three net bundles tied together behind the individual.

Three known Chongoyape-style bottles support the action presented in this scene (Fig. 5.67). Although lacking the stirrup spout, the first bottle exhibits a vessel texture and a modeled individual that identify it as Chongoyape style. Similar to the preceding example, the figure squats with a strap firmly pulled across the forehead. Behind him is a four-tiered bundle, highlighted by its rough texture in contrast to the smooth individual. The second Chongoyape bottle is illustrated by Campana (1995: Fig. 318). The human figure, represented with earplugs, also has a strap pulled firmly across the forehead. Behind him is ten-layered bundle of an unidentifiable form. A porter from the Razzetto collection also bears a roughly textured three-part bundle behind it, with the strap pulled across the head (Castillo and Pardo: Cat. 12). Finally, Lavallo and Lang (1981: 96) illustrate a variant stylized porter in a red-ware vessel. The nature of these porter individuals remains unclear. Yet the reference to net bundles in the first example corresponds well with the symbolic role of the net in a Classic Cupisnique visual corpus.

In the later Chongoyape bottles, similar porters with headbands bear on their backs high-status or mythical anthropomorphic figures, identifiable by their more elaborate headdresses and large earplugs (Lavallo and Lang 1981: Fig. 58; Lapiner 1976: Fig. 4). Such porter figures may have performed not only a symbolic role but one of marked status. In the succeeding Moche culture on the north coast, similar net bundles appear in the iconography in striking similar form as those in the Cupisnique bottle scenes. The net bundles in Moche iconography relate to scenes of coca taking and

Mountain Sacrifice (Donnan and McClelland 1999: Fig. 4.90). These correspondences support the symbolic role of such net bundle porters in the Cupisnique visual system.

#### 5.3.8 Floating on Gourds

A stirrup spout bottle from the Polí collection was published by Bonavia (1994: Fig. 12). The heavy post-fire paint and unique design suggest a local style within the Cupisnique sphere. The ceramic exhibits an anthropomorphic figure with top knot hairdo, necklace and earplugs lying belly-down over two round objects. The objects appear to be gourd floats held together by a net rendered in contrasting white paint. A similar scene appears in another regional style stirrup spout bottle (Fig. 5.68). The figure, which has no earplugs or top knot hairdo but wears a simple loin cloth, lies over two gourd floats held together by a net pattern.

These ceramic scenes, though absent from the plain grey or brown ware Classic Cupisnique style, suggest an important connection to the use of netted gourds as well as figures floating on water. The concept of netted gourds is implied on the bottles of isolated heads in net designs. The floating individuals are reminiscent of the modeled monkeys in similar pose on Cupisnique bottles (see below), perhaps linking visually these symbolic elements.

#### 5.3.9 Jar Carriers

Similar to the porters with bundles across their backs, a few Classic Cupisnique bottles show figures carrying jars and pots. One unique image and a set of figures are particularly noteworthy. The first is the most unique and presumably derives from Quindén in the mid-Jequetepeque Valley. The ceramic was first published by Lapiner (1976: Fig. 36) and subsequently with drawings by Alva (1986: Fig. 244a-c). It is a grey

ware bottle with incisions, which are highlighted by the brown undertone. A modeled anthropomorphic figure composes one end of the stirrup and is seated in cross-legged pose. The individual has no particular markings or emblems of status – no earplugs, necklace or loin cloth. With the right arm, he tilts a canteen forward as if to pour something into a handled dish held over his lap. The action is simple and so far unrepeated in other Cupisnique ceramics. Incised designs, which illustrate anatomic faces and serpent heads, decorate the outer face of the vessel body. Such designs are common on Classic Cupisnique stirrup spout bottles, securing the scene within the visual corpus.

Certain ceramics present a repeated motif in north coast Formative Period portable art; however, they consist of modeled jars and not stirrup spout vessels. The jars are largely polished brown ware vessels modeled as anthropomorphic figures wearing long cloaks (Fig. 5.69; Bonavia 1994: fig 14; Donnan 1992: fig. 28). The individuals sit with legs outstretched in front and the cloak covering to the ankles. One arm (usually the left) is incised at the side while the other is modeled and holds a wide-necked jar balanced on the head. The hair often extends past the shoulders over the cloak, which may exhibit small circular spots.

Within this group, two examples may be highlighted to clarify their rough temporal association with the Classic Cupisnique corpus. The first example pertains to the Brüning Museum collection (Fig. 5.69). The jar was excavated by Walter Alva at the Middle Formative site of Purulén in the lower Zaña Valley (1988a). The excavations – though limited – yielded no stirrup spout bottles or fragments and a calibrated radiocarbon date of around 1400 BCE, prior to the Classic Cupisnique style. Further excavations at Purulén are needed to clarify the occupational sequence of the site. Nevertheless, the jar offers visual parallels with Classic Cupisnique forms such as the simple modeled face, round earplugs, bracelets and seated posture.

The second example presents a similar polished brown ware jar, pertaining to the Jequetepeque or Zaña Valleys. The publication by Bonavia (1994: Fig. 14, right) shows

the ornate back side. Around the body of the vessel are incised designs of an isolated head and abstract forms. The isolated head notably alludes to the Classic Cupisnique program, clearly tying these jar carriers with the larger visual system. In particular, these figures associate with the individuals bearing children (below), suggesting – along with the long hair and long cloak – that the jar bearers are female.<sup>25</sup>

#### 5.3.10 Individuals with child

Two stirrup spout bottles represent individuals holding children in their arms or across their laps. The first is a dark polished brown ware Classic Cupisnique stirrup spout bottle that currently pertains to the Larco Herrera Museum in Lima (Cat ML040342A; Fig. 5.70). The individual has a seated pose similar to the jar carriers, with legs outstretched. There is a child in the arms, whose head is to the right side and faces in toward the body. There are no other details of dress or ornamentation.

The second example is a tan ceramic bottle also with transverse stirrup spout (Fig. 5.71). The design of the hair and face of the individual closely parallel the preceding example, with thick ‘sideburns;’ however, the figure has the legs drawn into a half squat position and holds the child to the left side. From a detailed photo of the child’s head, it appears to be suckling the left breast (Fig. 5.72). There are no other decorations or adornments on the individual. Since the main figures relate in form to the scenes of individuals with jars on their heads, this may suggest their mutual identification as images of females in Cupisnique iconography. This association is supported by a so-called Tembladera-style figurine that combines the two subjects and is clearly a female holding a suckling child (Fig. 5.73).

### 5.3.11 Final Observations

This section provides a brief review of the modeled anthropomorphic figures encountered in the Classic Cupisnique corpus. I identify the subjects by their action, dress, and visual parallels. I limit the discussion largely to those types that present either 1) more than one known representation of the same scene or action, or 2) clarification to other subjects in the corpus. Although the meaning of such images remains for further investigation, clear themes emerge through the corpus: capture, decapitation, sacrifice and fertility.

Absent from the modeled figures in Classic Cupisnique ceramics are the highly regaled anthropomorphic forms known from the monument at Chavín de Huántar. The Classic Cupisnique individuals are relatively plain in dress and accoutrements, without feathered backflaps or elaborate headdresses. There does not appear, as such, to be a distinct set of high-status individuals highlighted in the visual program. The visual corpus thus accords with the limited status distinctions encountered by Larco (1941) and Elera (1998) in excavations at Classic Cupisnique cemeteries or monumental centers. Items of adornment recovered from excavations, such as earplugs and bracelets, are represented in the iconography, perhaps reflecting status markers – and their explicit removal in the case of certain captives. Such emblems of social rank appear to increase in subsequent ceramic repertoires along the north coast. These social changes may be evinced in the Late Formative Period high status tombs at Kuntur Wasi (Onuki 1997), and those looted from Chongoyape and Cerro Corbacho on the coast (Lothrop 1941, Alva 1992).

The consistent typology of figures that appears in this set further attests to a developing ideology framing such roles – captives, porters, seated individuals, individuals with a child. That the types are replicated within the diverse – and as yet not well understood – styles of the Middle Formative period reflects their communicative value and intrinsic meaning. It remains unclear whether the represented actions were actually enacted, and likewise whether the illustrated figures correspond to individuals or



social roles in Cupisnique society. The archaeological record for Classic Cupisnique is currently too limited for such assessments. A more detailed comparative review of burial contexts and iconography may eventually offer greater insight. For the moment, the anthropomorphic images in Classic Cupisnique iconography are treated as a critical foundation in understanding this highly developing Middle Formative Period culture, by defining its possible ritual system and conceptual framework.

The propensity for modeled naturalistic forms – human, animal and plant – was established by the Classic Cupisnique and became a hallmark of succeeding north coast cultures (Larco 1941). The reasons behind such figural developments must be acknowledged, through their detailed attention – or lack thereof – to specific forms and figures. As with the distinct human forms, the animals and plants illustrated in Cupisnique iconography provide an identifiable ritual ecology, natural elements whose selective illustrations frame the iconographic system. I have already referenced certain plant and animal forms with regard to the complex themes. Nevertheless, many of these same forms appear in isolation, and their relative proportion within the system may be instructive for not only interpreting a Classic Cupisnique ideological system, but also for registering changes within successive ceramic programs along the north coast.

#### **5.4 Land Animals**

The land animals illustrated in the corpus suggest that the Cupisnique ceramicists had a relative familiarity with the natural forms and strove to represent a particular animal. The most identifiable animals in the Classic Cupisnique corpus include felines, serpents, monkeys and deer. In this section, I further propose tentative identifications of llama, armadillos and spectacled bears. Finally, rodents and frogs become more common in the Late Cupisnique ceramic styles.

#### 5.4.1 Feline

The feline is undoubtedly the most ubiquitous animal form modeled in Classic Cupisnique iconography. As discussed above, the feline has generated a considerable scholarship regarding its comparative value as a possible symbol of shamanic practice. In the feline-cactus scenes, the feline has been interpreted as the animal counterpart of a shaman in Cupisnique and Chavín culture, spurred by its regular illustration alongside the columnar cacti identified as the hallucinogenic San Pedro (*Trichonocereus pachanoi*). Yet a number of Classic Cupisnique portable objects depict the feline independent of these scenes. Such isolated felines may well recall their symbolic role within the feline-cactus theme. A review of their poses, forms, and species identifications is thus inherent to understanding the visual program.

The feline appears modeled on a number of Classic Cupisnique polished brown and grey ware vessels, as well as occasional graphite-painted bottles. The poses are relatively consistent across the sample; the feline either sits upright or crouches low with forelegs bent in at the sides. Both positions are taken in the capture of humans or deer (Fig. 5.6-5.7). As noted above, the head largely gazes forward; the backward glance only appears associated with the capture of humans or on the more complex scenes. The felines exhibit 'winged' eyes, or relatively almond-shaped eyes with heavy top lid and downturned corners. This eye form appears to reflect the natural eye of the cat species. The large majority of felines have concentric circles repeated over the body, with ones often situated on the legs and the crown of the head. A few examples further host striped bands at the ankles. The most consistent features of the felines, due to their inherent symbolism, are the fanged mouth and modeled claws.

As discussed in Chapter 2, the consistent illustration of concentric circles on the feline form has led scholars to identify these elements as stylized pelage markings (Burger 1992; Lathrap 1973).<sup>26</sup> The largest member of the New World cats, the jaguar (*Felis onco/Panthera onco*), exhibits such black spots, which may at times even take a

distinctly circular shape. Associated with tropical forest and jungle environments, the jaguar boasts a considerable roar and comfort with both climbing trees and swimming through water. The jaguar is a solitary hunter, consuming deer and other smaller mammals. Lathrap thus points out the considerable threat such predators pose in the competition for prey and to domesticated animals (1973). Although largely absent from the coast today, Elera notes that jaguars still appear on the north coast and at mountain jagüey to reproduce (1986). Alva postulates that jungle environments such as the mid-Zaña valley likely had greater pervasiveness on the north coast during the Formative Period (1988b), thus perhaps extending the local ecology relevant to the jaguar. In general, most scholars agree on the symbolic import such ferocious jaguar would have for Formative Period populations. The concentric circles, though abstract, would specify the jaguar in the feline-cactus theme – as pre-eminent hunter.

The pelage markings, however, sometimes appear along with bands at the ankles (Fig. 5.74). Such banding does not occur on the jaguar but features regularly on another local wild cat, the ocelot (*Leopardis pardalis*). The ocelot is a considerably smaller feline with clear striped markings along the tail and legs. It hunts small mammals and may be domesticated. Native to the coast and inner highlands, the ocelot presents a more common species of wild cat with which to associate the theme and may have proved a viable local substitute for the jaguar.

When the feline is represented without markings or concentric circles (Fig. 5.6), investigators posit third species identification: the puma (*Felis concolor*) (Cordy-Collins 1996, 1998; Sharon 2001). The puma is a large cat, but relatively smaller than the jaguar and with less impressive vocalizations. Pumas have a plain tawny coat and are more common in the highland environment of the Andes. Though less impressive than the jaguar, the puma may have served as apt feline predator for the Cupisnique program.

With this review of the three species, I appear to come no further in identifying the ubiquitous feline in Chavín and Cupisnique iconography than previous researches.

This is due to the possible inclusion of, and perhaps unnecessary distinction between, all three species of large cat in Formative Period art. Two observations are critical in this statement. For one, the feline in Early and early Middle Formative monumental art does not exhibit pelage markings, for example, on the murals at Cerro Sechín (Samaniego, Vergara and Bischof 1985: Fig. 7-9). The markings rather appear during the late Middle Formative iconography, in clear association with the feline-cactus theme. It is possible that the jaguar was singled out at this moment, but likely not at the expense of feline symbolism already in place. The choice of the jaguar may have emerged through greater interaction with fertile highland environments, such as the inner Zaña Valley or the mountain jagüeyes. The increased acquisition of *Strombus* and *Spondylus* during the latter half of the Middle Formative also evinces increased trade with the north. Greater interaction with northern tropical regions may also have spurred this symbolic selection.

In slight contrast to this assessment, the second observation is that the markings are consistently rendered as concentric circles. Unlike later Moche ceramics (Fig. 5.75), the Cupisnique potters make no attempt at natural representations of pelage markings. They appear to select this abstract mode directly. This may result in part from the lack of a developed painting tradition and the common use of incision for decorating. Yet the choice of this particular abstract geometric form must rest on a concept greater than simply indexing feline pelage markings. The concentric circles, as I discuss below, appear also on serpents, monkeys and *Strombus* shells in Classic Cupisnique vessels. As such, they conceptually tie together these various representational forms. While the feline hosts the design the most consistently, the concentric circles may refer to concepts shared by these species. Therefore, the feline identification should not rely too heavily on the concentric circles. They may rather serve a dual purpose, as indexes of pelage spots and symbols of the feline-cactus theme.

A review of the visual corpus suggests a proportional decrease in modeled ceramic felines into Late Cupisnique and Chongoyape vessels (1986). They are absent

from ceramics in Late Formative burials at Morro de Etén and Chongoyape, as well as offerings at Poro Poro (Alva 1988b, Elera 1986, Lothrop 1941, Onuki 1995). Of the known later examples, the felines assume similar poses as the preceding styles and boast concentric circle markings (Alva 1986: Fig. 360). In contrast to earlier forms, however, the surface texture is often rough, which Toshihara suggests is symbolic of the feline fur (2004). Yet such texture is consistent with the stylistic trends in Chongoyape and Late Cupisnique ceramics and must be evaluated within these larger corpuses. The current sample of northern late Formative Period ceramics thus implies that modeled feline images wane slightly in deference to a new set of animals – the rodent and owl.

In contrast to the ceramic decline, during the Late Formative, the feline continues to be represented in stone sculpture and gold objects, blended into composite forms (see below) or isolated for its fanged visage (see below). The selected media and style suggest a change in the feline concept and the symbolic status it denotes to the bearer. The blending with avian attributes may also imply a conceptual transition between or blending of these animal forms.

#### 5.4.2 Serpent

Although scholars have often posited a relatively secondary role to serpent images in Cupisnique iconography (Burger 1992, Cordy-Collins 1996, Sharon 2000), the representations attest to a considerable corpus. Modeled serpents appear on a number of brown and grey ware Classic Cupisnique bottles, as well as a variety of graphite-painted ceramics. The variety of poses, styles and embellishments on these serpent forms is striking in comparison to the feline representations. Yet there are relative consistencies within and across the given samples, suggesting a shared conceptual basis.

The ceramic bottles either illustrate a single complete serpent or two opposing serpents on the vessel body. The serpents may coil from the base, with their heads at the

top of the vessel chamber (Dioses 2000: Fig. 60). Or they may rest on their neck and chest with the tail curled up over the head (Fig 5.76). When two serpents appear on the same vessel, they may intertwine with their heads projecting in contrary directions or appear on opposing sides of the vessel. This former design is most common to the monochrome polished vessels. Given the lack of color, the two serpents are often distinguished by their body patterning. Alva illustrates an example where one serpent hosts a rope-like body design and the other linked concentric circles (1986: Fig. 173). They wind up the vessel body together, an intertwined pose that may recall mating boas (Elera 1998: 66). Another monochrome bottle illustrates the serpents as two heads comprising the same body – or bicephalus (Dioses 2000: 39). An intricate net-like pattern is incised over the entire body. In contrast with sculptures at Moxeke and Pacopampa that illustrate a serpent head with two bodies (Burger 1992: Fig. 68, 93), the bicephalus serpent on the Cupisnique ceramics continues into Moche iconography.

In the graphite-painted ceramic tradition, the two serpents occur on opposing sides of the vessel. The serpents in this style more consistently display concentric circle markings, often set off from the body in opposing red or black coloration. The serpents also may differentiate across the vessel by their color: a red serpent on one side, a black serpent on the other (Fig. 5.76). The dual color scheme is thus highly adapted in these vessels. The serpents on these vessels often take a similar pose to the contortionists, with the tail curled up over the head (Elera 1993). The meaning of such a possible visual metaphor remains uncertain.

As discussed above, the serpent appears occasionally in the feline-cactus scenes. When present, the serpent body often wraps around and over the vessel body with the head appearing at the top of the vessel (Fig. 5.3-5.4; Sharon 2000: Fig. 13-14). The head of the serpent, in fact, may loom over a feline image below. In one instance, the serpent wraps the tail around the opposing feline, suggesting capture and reinforcing its identification as a boa constrictor species (Fig. 5.3-5.4). Within the feline-cactus

program, the serpent regularly hosts concentric circle markings. These markings, however, frequently link together like a chain, or like a braided rope pattern (Dioses 2000: Fig. 39).

The snake markings have led investigators to identify them as the tropical forest anaconda or the coastal *macanche* (Elera 1993; Lathrap 1973). The addition of body markings in the Classic Cupisnique ceramic tradition, however, once again may 1) serve to identify a newly highlighted species or 2) serve to associate the serpent with a larger visual program symbolized by the shared circular markings and their possible bi-coloration. It seems likely that the markings on the feline and serpent, which appear highly stylized from their initial use, are meant to perform both functions.

#### 5.4.3 Monkey

Modeled figures of monkeys are identifiable in Cupisnique iconography most often by the long, curved tail. The face is flattened in comparison to anthropomorphic and feline forms, and it often boasts definition around the eyes and face (Alva 1986: Fig. 273). In the graphite-painted ceramics, this definition is rendered as a dark face against lighter body. Similar to the serpents, the monkey images appear in a variety of poses; however, there is relative consistency across the styles.

The majority of monkey figures are squatting with their knees drawn up, in striking resemblance to human and feline forms (Fig. 1.4). A polished brown ware bottle illustrates a monkey holding the hands to the mouth as if eating (Fig. 5.77).<sup>27</sup> Another monochrome vessel published by Lapiner shows the squatting monkey with arms forward resting on the head of a feline (1976: Fig. 50). The monkey is decorated by incised circles, with two concentric circles located at either shoulder. The feline head is covered in larger concentric circle designs, and it boasts interlocking fangs in contrast to the simple mouth of the monkey. The pose compares to that taken by felines in other scenes.

Finally, a monochrome bottle places two modeled monkeys at either end of the stirrup and in opposite directions (Fig. 5.78). The animals lie on their bellies as if floating or resting on the rounded vessel body. The pose is similar to a graphite-painted ceramic recovered from the Chicama Valley.

In the graphite-painted style, the squatting monkeys regularly display concentric circle markings on the legs and intricate designs on the body (Castillo and Pardo 2009: Cat. 7; Fig. 1.4). One graphite-painted ceramic recovered by Larco (Fig. 5.79) represents a monkey (without spots) lying belly-down on a vessel base, which is divided into three parts. Larco identifies the scene as a monkey characteristically resting on a mass of rocks (1941: Fig. 124). Another unusual bottle displays the monkey with the body of a peanut (Fig. 5.80). This ceramic presents the only known Classic Cupisnique representation of a modeled peanut shell, which association with the monkey form remains unclear. Finally, an unusual late example illustrates a monkey grasping a bicephalus serpent below (Lavalle and Lang 1981: 115). The scene presents the concept of capture associated with the monkey.

The most naturalistic modeled monkeys appear in later ceramic styles from the north coast. The most well known example is located at the National Museum of Anthropology and Archaeology in Lima (Fig. 5.81). The ceramic jar is modeled as a standing monkey with hands on his chest and mouth open upwards. The large feet and curled tail serve to balance the sculpted figure, which has finely speckled texture. The open mouth pose suggests its identity as a howler monkey (*Alouatta* sp.), a tropical forest species whose howl is of considerable volume and whose mouth exhibits substantial fangs. The definition around the eyes and face recalls the distinct frame of fur around the dark face of the monkey.

This pose – wide open mouth – is further reflected in a set of ceramic images bearing an anthropomorphic human head (Burger and Salazar 2000: 50). One of these ceramics is currently at the Brüning Museum and derives from the Middle Formative site



of Purulén in the Zaña Valley (Fig. 5.82). In this instance, the vessel body has a burnished net pattern around the base. The open-mouth gesture may allude to a play between human and monkey forms.

A final example of a modeled monkey in Late Cupisnique style is said to derive from Puémapa in the Jequetepeque Valley. The ceramic presents another highly naturalistic form, with defined face and eyes and interlocking fangs. The monkey has the left hand on the head and the right over the belly. The legs are pulled into the chest in a squat, similar to other anthropomorphic and simian figures. The large fangs would suggest a howler monkey for the identity of this image. This arboreal species may have been known through contact with tropical environments to the north, through the trade evinced by the *Strombus* and *Spondylus* shells.

Archaeological Record: There are only a few notable instances of monkeys in the archaeological record of Middle Formative monumental centers. Monkey remains have been recovered from the centers of La Galgada in the Tablachaca Valley and Ancón in the Supe Valley. The first instance corresponds to a complete but unidentified specimen buried in a dedicatory cache within the monumental construction (Grieder et al 1988: 43). The latter example at Ancón was a cebus monkey (i.e. capuchin) placed in the burial of a high status male individual of thirty years of age, who had items of adornment such as bracelets and a feather fan (Patterson et al n.d.). Along with colorful feathers, such monkey remains on the coast are interpreted as symbolic of trade with tropical forest regions (Burger 1992). Finally, Uzawa notes the particular presence of a capuchin monkey at the site of Kuntur Wasi, pertaining to early occupational layers (2009).

Comparative Representations: Monumental representations of monkeys arguably appear in Formative Period contexts at Punkurí (Nepeña Valley), Kuntur Wasi (Jequetepeque

Valley), Cumbemayo (Chapter 4) and Chavín de Huántar. The example at Punkurí is a largely naturalistic contour of a monkey, which occurs in relation to a fish figure and encompassing avian form. Carrion-Cachot identifies a sculpture from Kuntur Wasi as a monkey with ribs showing, citing the importance of monkeys in local tradition around San Pablo (1948: 149; Lam XXI). Finally, a monkey petroglyph occurs in the ‘Sanctuary’ at the Cumbemayo Canal – the only identifiable figural form (Chapter 4; Fig. 4.15, 4.22).

At the site of Chavín de Huántar, a sculpted ashlar in the New Temple Plaza is often identified as a standing monkey, based on the illustrated curling tail (Burger 1992: Fig. 180). The figure, which has a top-knot hairdo and pendant earrings, holds an object toward the mouth and bears a double-headed snake staff. Such a presumed performative role of a monkey form appears unusual to this monumental center. Like the Cupisnique ceramic examples, however, the sculptural representation highlights the open mouth of the monkey and his upward human-like stance. (Fig. 5.81). These images may establish a symbolic parallel between monkeys and humans in certain action.

The relatively common representation and archaeological presence of monkeys through the Formative Period argues for their symbolic importance. The strikingly similar presentation of monkeys to those of serpents and felines, including the concentric circle markings, suggests their role in the Classic Cupisnique visual complex. Beyond ecological considerations of such monkeys as recalling tropical or subtropical conditions, more detailed species identifications and their relationship to the larger Cupisnique corpus remain for future investigations.

#### 5.4.4 Deer

Beyond the scenes of deer capture in Classic Cupisnique and later Chongoyape images (Fig. 5.42-5.43), it remains difficult to identify deer in Cupisnique iconography, especially in comparison with llama figures. This is due to the relative absence of antlers

in modeled figures, which may recall either animal form. I am aware of only one jar that boasts modeled antlers, and it pertains to the Larco Museum (Cat. ML0150776). It is an unusual piece, presenting just the head and neck of the animal. The antlers wrap around either side of the jar neck while the animal face is relatively simple.<sup>28</sup>

The represented species is likely the white-tailed deer (*Odocoileus virginianus*). These deer are native to the north coast of Peru and feature quite extensively in succeeding Moche iconography (Donnan 1997; Elera 1998). The Andean deer, or *huemul* (*Hippocamelus antisensis*), is a smaller species native to the upper highlands. Cervid remains from domestic sectors of highland and coastal Middle Formative sites evince active deer consumption, followed by a gradual decrease into the Late Formative in favor of domesticated llamas (Chapter 3).

Conceptually, the presence of deer along the lower valleys corresponds to the humid season and the increase of *lomas*, or wetland marshes. The hunt of deer, both by the feline and human, would thus be a natural referent to this time of increased rains and vegetation. The deer hunter and modeled felines discussed above also suggest the symbolic role of deer as captive victims (Fig. 5.7, 5.42-5.43), perhaps comparative to human captives. Notably, both humans and deer are illustrated as 1) tied by the ankles or wrists and 2) overtaken by felines. The corresponding role of deer and human victims in succeeding Moche iconography supports this interpretation (Donnan 1997).

#### 5.4.5 Llama

The llama appears in Classic Cupisnique images with a relatively consistent posture and facial design. At least five stirrup spout bottles illustrate modeled llamas, either lying on their bellies or resting on their sides (Fig. 5.84-5.85; Lavalle and Lang 1981: 55). The bottles are polished brown ware with minimal embellishment. In contrast to these plain forms, one example renders two llama heads at the stirrup ends. The incised

designs around the vessel body represent isolated heads prevalent in Classic Cupisnique iconography (Fig 5.86).

The llamas modeled on these bottles likely represent the common domesticated species *Lama glama*. Their appearance in Classic Cupisnique iconography contrasts with the paucity of independent modeled deer images in the corpus. As noted above, faunal analyses evince a gradual transition from the consumption of deer to llama domestication during the Middle to Late Formative Periods (Chapter 3).<sup>29</sup> Once domesticated, the consumption of llama may have become a marker of social stratification, with younger and tenderer portions being reserved for local elite (Miller and Burger 1995). If my identifications are correct, the Cupisnique ceramic corpus suggests that llama domestication had already obtained a symbolic placement in the visual system. Unlike succeeding Moche images, however, the Cupisnique llama are illustrated without accoutrements; that is, they are not represented yet as pack animals, so common in Moche iconography (Donnan 1978: Fig. 174-179).

#### 5.4.6 Rodent

Rodents (*Oryzomys sp.*) appear in a limited number of Classic Cupisnique ceramics; however, their presence in this corpus is critical as a comparative pose to succeeding visual programs on the north coast. Currently, only one known Classic Cupisnique ceramic illustrates modeled rodents (Alva 1986: Fig. 256). The rodents occur as a pair, forming the base of either end of the vessel stirrup and lying down over the bottle chamber. No other embellishments appear on the ceramic.

By the Late Formative, however, modeled rodents become more frequent in the north coast ceramic programs. They appear in registered contexts, such as the high-status burial in Chongoyape and the burial at Morro de Etén (Elera 1986; Lothrop 1941). In such instances, the rodents are represented alone, modeled on one end of the stirrup. They

sit upright (rather than lying down) and hold an object to the mouth as if eating (Fig. 5.87-5.88; also Castillo and Pardo 2009: Cat 18). This action alludes to the role of rodents in consuming plants, such as productive field crops. As such, the rodents may signify the abundance of food and the humid season through their representation in the late Formative Period north coast styles.

The increased illustration of rodents in Chongoyape and Late Cupisnique ceramics notably aligns with the increased illustration of owls in these same visual programs. As the predominant hunter of rodents, the mutual increase of owl forms may cite a symbolic ecological relationship. In this regard, it is interesting to note the illustration of a netted rope design under one modeled rodent image (Fig. 5.88) and a hexagonal net design with isolated heads around the base of another (Fig. 5.89). Rope and net elements allude to capture, for which hunting occurs most at times of abundance.<sup>30</sup>

#### 5.4.7 Armadillo

There is only one known example of a modeled armadillo in north coast Formative Period iconography. It is a grey ware stirrup spout bottle that derives from a ceramic offering placed in the Late Formative monumental center at Poro-Poro near Udimá, in the upper Zaña Valley (Alva 1988b) (Fig. 5.90). The armadillo is rendered on its side curled partway into its shell. Four bands are clearly delimited along the back shell. Given the marked striations, the figure likely illustrates the three-banded armadillo (*Tolypeutes matacus*) common in tropical and sub-tropical South America. An actual specimen of a *Tolypeutus sp.* was recently discovered at El Areñal, a Cupisnique cemetery near Ventarrón in the Lambayeque Valley (Alva Meneses 2008, personal communication).

Although the animal is represented lying partly open on its side, the three-banded armadillo is capable of curling into a ball, with nothing exposed but the outer shell. The artist appears to have intended the ceramic form to remain open in order to illustrate the action of the armadillo. Although the modeled pieces are now missing, their remains on the bottle indicate that the armadillo was holding his tail between the legs with his left hand. The right hand is placed over the mouth.

The two occurrences – one representational and the other archaeological – of the armadillo attest to its importance, likely in reference to a tropical ecology of the northern valleys or far north regions of Ecuador (Alva 1988b).<sup>31</sup> The armadillo is a solitary hunter that feeds largely on ants and termites, insects which flourish in the humid season. Unlike other armadillo species, the *Tolypeutus sp.* does not dig burrows; however, they will occupy abandoned holes and hide under thick vegetation. Since armadillos do not persist heavily in Cupisnique iconography or successive visual programs, it would seem that they did not factor heavily into the conceptual system.

#### 5.4.8 Bear (?)

In the section on the dual-eye motif, I addressed the central stele – Monolith 1 – at Kuntur Wasi. On the side opposite the dual-eye motif, there is a figure modeled with a staff in the hands and large goggle eyes (Fig. 1.23, right). This same figure appears on a Classic Cupisnique style bottle currently at the Brüning Museum in Lambayeque (Fig. 5.91). An additional brown ware polished Cupisnique stirrup spout bottle illustrates a similar visage with goggle eyes; however, in this instance, only the head is modeled (Fig. 5.92). The representations allude to a protruding snout; otherwise presenting a simple form. At the site of El Mirador at Pacopampa, Daniel Morales has identified ceramic sherds with such snout form as a bear (1980: Lam 30).

Based on the goggle eyes and snout of these ceramic and sculpted forms, the figures may quite tentatively be identified as recalling the Andean spectacled bear (*Tremarctos ornatus*), the only bear species native to South America. The bear derives its name from distinctive white rings around the eyes, which contrast markedly with the black fur. While the bears largely occupy the cloud forest regions from Venezuela to Peru, they may venture up to 4000 meters and are present in all Andean ecological zones, including the desert coast north of Pativilca (Peyton 1980).

In comparison to other New World bear species, the spectacled bear is non-hibernating, arboreal in nature and omnivorous (ibid.). Spectacled bears largely consume berries, grasses, and fruits, preferring Bromeliads such as *Tillandsia sp.* The bears will also climb columnar cacti for the fruit, or feed directly on the pulp of cacti such as San Pedro (*Trichonocereus pachanoi*) (ibid.). Although less common, the bears may consume rabbits, small birds, rodents, and carrion, as well as premature maize crops. When doing so, the bears may stand on two feet, holding the corn in both hands like a human.

A recent faunal analysis of the Kuntur Wasi excavations evinces the presence of bear remains, reinforcing a possible symbolic role of these species at the site center (Ozawa 2008). Elera similarly cites their presence from the Cupisnique Gorge through Cerro Puémape (1998: 67). Such anthropomorphic behaviors and dietary choices of the bear may have factored in inclusion within the visual corpus, in particular at highland centers such as Kuntur Wasi and Pacopampa. The ceramic bottles, however, suggest that the significant elements in the iconography are the goggle eyes rather than any intentional identification of the natural animal species.

#### 5.4.9 Batrachians

There are no known instances of frogs modeled on Classic Cupisnique bottles or jars. Yet the frog appears on two presumably Late Formative Period stirrup spout bottles.

A polished brown ware vessel at the Brüning Museum, Lambayeque exhibits a squatting batrachian image with bulging eyes and broad lips (Fig. 5.93). The lips are parted to reveal a series of fangs, the body is spotted with polished circles, and there is a tall ridge between the eyes. The base of the vessel has isolated incised heads with scrolls emitting from the mouth and neck. Concentric circles fill the space between each head. The distinct form of the ridge would seem to recall a certain unidentified species of toad.

The final late Formative modeled bottle is from the Stuttgart Museum (Fig. 5.94). It shows a central frog with rough texture for the body and polished black legs, eyes, and mouth. Four smaller frogs face toward the central image, two on each side of the body. The scene appears to be of a mother and babies, recalling concepts of reproduction. Associated with the coming of the humid season, toads often hide underground until the first rains. The presence and reproduction of toads may be a metaphor for fertility returning to the coast (Bourget 2006: 140-142). In this regard, the incised concentric circles and isolated heads on the Brüning piece may parallel their meaning in other scenes and on other species (see below) – as a reference to the humid season, to rains or fertility.

While these examples reflect a late introduction of frogs in north coast iconography, images of frogs appear in the Preceramic, such as a wooden bowl from a cache in Aspero in the Supe Valley (Burger 1992: 39). Nevertheless, the representation of frogs in succeeding Moche iconography supports the late Formative increase in their symbolic inclusions within the north coast visual programs. Alongside the rodent and owl, the frogs appear to comprise an adapting set of symbolic fauna extending on the Cupisnique themes of fertility, hunting and abundance.

#### 5.4.10 Final Considerations:

The animals species selected for representation clearly define particular species associated with themes of hunting and capture in Cupisnique iconography, as well as



fertile ecological niches. The feline and deer images reference concepts of hunting and capture. Previous scholarship has associated the feline and serpent with fertile coastal valleys and highland watering holes. The bear and monkey also recall more tropical or sub-tropical conditions, either within the coastal valleys or from northern regions into Ecuador. Rodents and frogs may proliferate on the north coast, in conditions of abundant vegetation and agrarian fertility (Bourget 2006). These forms increase in the Late Formative ceramics, suggesting increase emphasis on productive environment conditions.

## 5.5 Birds

Avian images are common within the Cupisnique ceramic repertoire. Similar to the land animals, certain avian types are clearly identifiable – such as owls and parrot species – suggesting intentional inclusion in the visual system. The raptorial birds and small avian forms appear more stylized or generic; however, a larger corpus may eventually shed greater insight on their role or identification.

### 5.5.1 Parrots

At least three examples of modeled *Psitticidae* sp. – parrots and macaws – appear in the repertoire of Classic Cupisnique stirrup spout bottles. Two of the ceramics are illustrated by Alva in his 1986 volume (Fig. 246, 254). The first bottle was previously published by Lapiner (1976: Fig. 49) and derives from Talambo, in the mid-Jequetepeque Valley. It represents a modeled parrot or macaw lying on its belly (Fig. 5.95). The feathers of the wings, around the eyes and over the chest are finely incised, and it has a sharply curved and pointed beak.

The final two examples pertain to the Jequetepeque or Zaña Valley region. In each case, two parrots are modeled on the top of the vessel, composing ends of the

stirrup. The birds have finely incised feathers across the bodies and sharply curved beaks. The beaks, however, do not exhibit a beak tooth.<sup>32</sup> On one example, an isolated head is incised between the birds on the quadrangular base (Fig. 5.96) while the other bottle displays a more complex isolated head pattern around the vessel (Fig. 5.97). These two bottles thus suggest a close association between such parrot forms and the theme of capture and sacrifice signified by the isolated heads.

The presence of parrots in Cupisnique iconography is not surprising given the archaeological record of colorful feathers and actual bird remains since the Preceramic period. A number of feathers have been recovered from the Preceramic sites of Aspero (Feldman 1985), Río Seco, El Paraíso (Quilter 1985) and La Galgada (Grieder et al 1988), as well as an elaborate Formative burial at Ancón (Patterson et al n.d.), which also contained the remains of a cebus monkey (i.e. capuchin). Complete remains of parrots have been recovered from Preceramic levels at Ventarrón (Alva Meneses 2008, personal communication) and the late Middle Formative deposit in the Gallery of the Offerings at Chavín de Huántar (Lumbreras 1993, 2007).

In the Gallery of the Offerings, the *Psitticidae* sp. comprises the greatest number of bird remains, at twenty-three percent of the total bones recovered (ibid.). Lumbreras notes the intentional deposition of four complete specimens (1993: 306-307): two large species in Cell 2 and Unit 2, one medium species in Cell 5, and one small species in Cell 9. He identifies the species as the larger *Amazonia* sp. and smaller *Aratinga* sp., and suggests that they were raised by humans, given the presence of healed wing bones.

Given these ritually deposited *Psitticidae* sp. in the gallery, it is interesting to note two points with regard to the sculptural program at Chavín de Huántar. First of all, Building A (New Temple) was decorated with numerous cornice stones illustrating outstretched avian forms, which have been variously identified as eagles and hawks (Fig. 2.1) (Burger 1992, Rowe 1967). Davenport and Schreiber, however, propose that these sculptures represent parrots (1989). The investigators base this identification on the foot

arrangements and curved beak, as well as considerations of species comportment.<sup>33</sup> While disregarded in succeeding scholarship, their arguments merit greater discussion.

The second observation is that various cornice stones and plaza ashlar represent processing anthropomorphic figures adorned with ritual regalia, which comprise extensively decorative feathers or fans (Fig. 5.27-5.29). The highly colorful feathers of parrots, such as those found in ceremonial centers along the coast, would have provided considerable decorative presentation. The second construction phase at the recently excavated site of Huaca Partida in the Nepeña Valley illustrates similar anthropomorphic figures with feathered regalia in a well preserved polychrome mural. Finally, the male individual buried at Ancón with an elaborate feather fan, bracelets and anklets may suggest the actual presentation of such adorned individuals during the Late Formative Period (Patterson et al n.d.). The archaeological remains from these sites may thus allude to the symbolic as well as decorative use of these bird species.

As Lumbreras notes (1993, 2007), parrots feature heavily in succeeding Moche and Nasca iconographies of the Early Intermediate Period. For example, Proulx notes the consistent representation of parrots alongside warriors in Nasca iconography (2006). In a similar regard, Bourget posits the association between parrots and ritual warfare in Moche visual culture (n.d.). The Moche and Nasca cultures developed complex visual programs during the Early Intermediate Period, making the symbolic use of the parrots plausible without a Chavín precedent. Yet I would argue that the association between the birds and warriors in both traditions may extend from Cupisnique and Chavín cultures.

Within Cupisnique and Chavín visual culture, parrots likely were associated with tropical or subtropical environments to the north. Equally they may signal the humid season or the presence of El Niño along the coast (Bourget n.d.), by increasing in relation to the ripe fruit season and abundant crop production. They are social birds and easily trained, in some cases mimicking human speech. In their consumption of fruits, the strong beak may tear through the flesh to approach the central seed, cracking it open with

considerable force. Along with the colorful feathers, these characteristics may have elevated the parrots within the coastal iconographies and symbolic systems.

### 5.5.2 Owl

The owl is the most ubiquitous bird form in late Formative Period iconography. Notable examples exist in Classic Cupisnique; however, the greatest sample pertains to the Late Cupisnique and Chongoyape styles. A number of owls are modeled in full, but the majority features only the head or simply the eyes. While a number of animals in Cupisnique iconography are rendered by the head (see below), the eyes of the owl serve an even more symbolic role in their isolation.

Only a few known examples of modeled owls occur on Classic Cupisnique stirrup spout or single spout bottles. In the Larco Museum, two Classic Cupisnique stirrup spout bottles illustrate modeled owl forms. The first exhibits two complete owls at either end of the stirrup (Fig 5.98), and the second has two owl heads resting on an un-modeled vessel body (Fig. 5.99). The latter is graphite-painted style and boasts a stepped-volute design around the vessel base. It creates a pattern of dual coloration, which recalls a double wave motif.

A later style bottle portrays four owl faces around a spherical vessel body. Each round eye is shared by two faces, while four beaks protrude from the surface at even intervals (Fig. 5.100). In other words, four eyes and four beaks allow for the continuous presentation of four different owl faces around the bottle. This creative presentation compares with later Moche examples (Bourget 2006: Fig. 1.60), suggesting its development in Late Cupisnique iconography and continued use into Moche ceramics.

The remaining images of owls in Late Cupisnique and Chongoyape style ceramics are less creative. They range from full figural forms or the head on a round base, to

simply a head, or the eyes and beak. A stirrup spout bottle from the Brüning Museum presents a fine example of the second type (Fig. 5.101), as does a similar piece from a private collection (Castillo and Pardo 2009: Cat 17). The latter exhibits an incised net pattern around the base, similar to the rodent vessel form (Fig. 5.89). The net pattern may reinforce the role of the owl as hunter – or captor – in the late Formative Period.

The representations of owls in Cupisnique iconography make clear the round eye with radial striations, the beak, and occasionally small tufts of feathers that point upwards like ears. While the forms vary enough to make species identification uncertain, the majority without the feather tufts likely recall the burrowing owl (*Athene cunicularia*) (Fig. 5.99-5.101). The owl images with tufts may rather present the Great Horned Owl (*Bubo virginianus*) (Fig. 5.98). These forms are most often presented as full figures. Both owl species are fierce hunters of rodents along the north coast (Bourget 2006). Future research of Late Formative centers along the north coast may eventually provide more insightful information regarding owl representations, especially given their continued prominence into Gallinazo and Moche iconography.

### 5.5.3 Raptors

Unlike the preceding categories, the raptors present a much less naturalistic group of images. Similar to the owls and rodents, the raptors appear on a limited basis in Classic Cupisnique ceramics but are more common in other styles. I include within this category two distinct types of representations. The first group consists of modeled avian figures that exhibit sharp beaks and occasional talons along with an implied avian body. They usually display added features such as decorative head crests and eye modifications. The second set comprises the ubiquitous reduce-fire stirrup spout bottles with avian forms illustrated from low incision to high relief over the vessel chamber. The avian images may be outstretched or in profile, with the beak, feathers, and claws explicitly rendered.

Despite their identification as avian images, the faces in both raptor groups often present fanged mouths with a beak ‘mask’ added to the front. The line between the raptors and composite forms described below is thus relatively blurred.

Modeled Raptors: The most well known raptor image of the first type appears on a Late Formative bottle from the site of Kuntur Wasi. The bottle originally comprised part of the burial assemblage in Tomb 1 (Onuki 1995: Lam 11-4). The ceramic exhibits a stylized avian form with legs to the front of a round base. The red-and-orange ceramic has a polished red face with incised features such as round eyes, head crests and a sharp beak. Similar bottles reflect the diversity of late Formative Period northern styles (Bonavia 1994: Fig. 36; Fig. 5.102). In stark contrast with the second group, they are all modeled polychrome. A number of these images illustrate the eyes with double lines encircling, which may end in serpent heads. These embellishments recall certain avian sculptures from Chavín de Huántar (Tello 1960: Fig. 42). The placement of two ‘natural’ legs in front of a third base further mimics the stance of certain modeled felines and monkeys. Along with the blended facial features, the stance thus supports the overall composite form of these representations.

Beyond this rather consistent group, two bottles present more complex scenes. One unusual Chongoyape style bottle displays a raptorial avian form over a large modeled fish (Lavalle and Lang 1981: 88). The bird has its beak and claws over the fish in the act of capture. Kauffmann Doig illustrates a similar raptorial figure capturing a modeled serpent (2002: 218). The role of such composite raptorial birds as captors or hunters within Formative Period iconography is thus visually substantiated.

Relief Raptors: The second set of avian images is more abundant and appears on Late Cupisnique black polished bottles with high relief decoration. They often boast an

outstretched pose, with the wings broad to each side, the legs splayed and tail feathers in the center (Fig. 5.103; also Burger 1992: Fig. 235-236). The head looks upward in profile, in order to render the sharp beak. In a 1982 article, Peter Roe addressed a small group of three looted examples from Tembladera. He notes the close similarities to the avian images at Chavín de Huántar, both the cornice stones and Black and White Portal sculptures (Fig. 1.9, 2.1). Although the avian forms are highly stylized, the emphasis is on the sharp beak and feathered wings. The focus on the feathers may signal a symbolic or ritual focus, perhaps in regards to feathered regalia. Across the images, however, the avian beak provides the fundamental component, symbolizing capture and possibly decapitation.

Outstretched avian forms similar to these late Cupisnique relief images and the sculptures at Chavín de Huántar are reported to have existed in polychrome clay relief on columns from Casa Grande and the La Leche drainage (Kosok 1965; Burger 1992). According to Kosok (1965), the Casa Grande columns further may have exhibited hexagonal patterns along with the avian figures, thus equating the bird images with this north coast symbol of capture. Unfortunately, these columns and an innumerable amount of other northern Formative Period polychrome clay murals have been lost through modern destruction and construction.<sup>34</sup>

Given their related form and style to the monumental avian sculptures at Chavín de Huántar, a number of scholars identify the various raptorial avian forms as hawks or eagles, depending on the presence of an eye stripe or head crests respectively. If the avian figure bears head crests, most scholars agree that the species is likely the Harpy Eagle (*Harpia harpyja*), the large monkey-eating tropical forest species (Burger 1992; Lathrap 1973). In contrast, Yacovleff posited early on the use of eye stripes in south coast iconography to indicate a hawk species (1938). Chavín scholarship has since appropriated this identification (Rowe 1967, Roe 1974). The composite forms (with fanged faces) would thus allude to the parallel predatory nature of the large raptorial birds and the

fierce feline. More recently, Elera has posited that the avian forms recall the osprey (*Pandion haliaetus*), a coastal fishing bird that annually migrates down from the north to fish along the Peruvian north coast (1986, 1993, 1998).

In a similar stance taken with the feline images, I would again posit a possible cross-utilization of multiple species with less emphasis on the eagle and more attention to the falcon, osprey and parrots. A brief explanation of this logic is in order. The Harpy Eagle is an impressive predator of lowland jungle environments, capable of eating monkeys and other birds. Currently, no eagle remains are known from the archaeological record, although this may pertain to sample size and does not discredit symbolic visual reference.<sup>35</sup> With regard to the latter, however, it is important to note that eagle forms do not appear in either the succeeding Moche or Nasca iconographies, which yet represent ospreys, falcons and parrots (Bourget n.d.; Proulx 2006; Yacovleff 1938). Furthermore, the presumed eagle of the southern portal at Chavín de Huántar notably carries two fish along the staff, a feature Lathrap quickly set aside (1977).

For the Cupisnique images, the osprey would provide an apt member of an iconography that emphasizes fishing along the north coast. The association of the osprey to fishing may have been appropriated at Chavín de Huántar in the southern portal column. At the same time, the dark eye stripes of many falcon species – including the osprey – may have enriched the iconographic use of this feature throughout the cornice and lintel avian sculptures.

The raptorial bird species all boast sharply curved beaks, which Lathrap uses as the fundamental criteria of the avian identification. In the eagle and hawks, the beak usually has a small ‘tooth’ midway along either side, and it serves to break the neck of its prey (cit.). The beak tooth feature regularly appears in Chavín avian sculptures, but it is not consistently rendered on the Cupisnique stylized birds discussed above (compare Fig. 1.9, 2.1 and 5.102-5.103). This discrepancy may allude to a greater emphasis on the coastal osprey as a model for certain Cupisnique avian forms. The beak tooth, however,



also appears on *Psitticidae* sp., where it serves to break the shells of hard seeds. Since the Classic Cupisnique bottles of modeled parrots further do not render the beak tooth (Fig. 5.95-5.97), it is perhaps an element highlighted at Chavín de Huántar (Fig. 1.9, 2.1). It is possible that there was a visual equivalency drawn between the two actions or functions of the beak tooth – to break the neck of prey (raptorial) or a seed shell (parrot).

The beak and talons of the raptorial forms were clearly important, reflecting a similar emphasis on the fangs and claws of the feline images. As the Pacopampa mortar demonstrates (Fig. 5.104), the avian beak could be isolated and attached to other figural forms as a symbolic element. This type of element extraction is equivalent to the application of the spider chelicerae like a mask to a fanged mouth. Indeed, the Collúd mural suggests such correspondence through the blending of these ‘mask’ forms (Fig. 5.11). One late style stirrup spout bottle may further combine the two species – raptor and spider (Fig. 5.105). Based on their iconographic correspondences, the comparative features of these three species – avian, feline and spider – may be categorized as:

- 1) Symbols of capture: avian talons, feline claws, and spider web
- 2) Symbols of sacrifice: avian beak, feline fangs, and spider chelicerae

The coastal Cupisnique notably blend spider and avian forms at Collúd, while the highland centers at Pacopampa and Chavín de Huántar mix feline and avian forms (Fig. 5.104, 1.9). If such avian features came to serve ideologically both coastal and highland regions, this may explain the considerable increase in raptorial forms during the Late Cupisnique or Chavín style.

#### 5.5.4 Small birds

From the Classic Cupisnique through later styles, numerous ceramic bottles and bowls portray avian forms with rather small beaks and heads. Given their simple forms, I

have not identified species illustrated in the sample. The birds vary in form, presentation, and association with additional decorative elements, so they present no easy summation. Similar to the raptors, however, the forms may be divided into two distinct groups: 1) modeled small birds and 2) simple incised avian designs. The latter distinguish from the second raptor group based on the simple beak form and lack of talons. From each group, it is worth highlighting a few pieces with known provenance or archaeological context.

Modeled Small Birds: Alva reproduces four examples of small birds in his published compilation (1986: Figs. 207, 245-247). Two of the bottles present a small bird at one end of the stirrup, standing over the vessel base. The bird is upright, and underneath him appear designs of anatomic isolated heads and the pulse motif (Fig. 5.106). In another instance, two small birds form either end of the stirrup. The birds rest on their bellies without the illustration of legs (ibid.: Fig. 207). A similar position is taken by a small bird bowl, which was recovered from Tomb 1 at Cerro Blanco, across from Kuntur Wasi (Onuki 1995: Lam 5c-e). The tomb dates to the late Middle Formative and had a carved *Spondylus* shell pendant and a Classic Cupisnique stirrup spout bottle as additional offerings (ibid.). Not surprisingly then, the bowl shares in design with a Classic Cupisnique stirrup spout bottle of polished finish (Fig. 5.107). The small modeled bird displays finely incised concentric circles around the body. These designs appear anomalous given their usual placement on monkeys, felines, *Strombus*, and serpents.

Contrasting in form and boasting a later style, another small bird modeled ceramic was recovered from a ceramic offering at Poro Poro in the mid-Zaña Valley (Fig. 5.108). The bottle was deposited along with a modeled armadillo (see above) and a stepped volute design bottle. Alva (1988b) posits tentatively that the modeled avian form may represent a *pava de monte* (Galliformes), a general category of small bird species native – like the armadillo – to the more fertile Andean highlands of the Zaña region.

Incised Small Birds: The second category of small birds consists of simple incised forms that appear on a number of Classic Cupisnique vessels. The birds often are illustrated in profile with one wing feather and the tail. The head comprises an eye and simple beak or slightly angled beak form (Alva 1986: Fig. 235-236). The simple incised forms occur in association with the pulse design or as multiple figures around the base. Such incised forms continue alongside modeled birds into later styles (Alva 1986: Figs. 387, 388).

#### 5.5.5 Final Considerations:

Parrots and owl species are the most identifiable avian forms in Cupisnique iconography. The former likely pertain to, naturally and conceptually, highlight tropical and subtropical environmental conditions in which these birds flourish. Such conditions may be associated with climatic changes such as El Niño events along the north coast. The owl species rather suggest the role of nocturnal hunting species local to the north coast. In contrast to the parrot species, images of owls increase considerably into the Late Cupisnique and Chongoyape-style iconography. The shift in such animal species between Classic and later styles may come to define a new north coast ritual ecology. Along with the owl species, raptorial avian forms become more common in Late Cupisnique style bottles and within composite forms (see below). They suggest modified symbols of capture and possibly sacrifice through decapitation. In contrast with the stylized raptor images, however, the owl forms persist within north coast iconographic programs.

### 5.6 Sea life

As Larco noted early on (1941), Cupisnique iconography boasts a number of coastal marine and riverine species. These include images of shellfish and fish, which

species abound in times of abundant rainwater. In particular, the *life* and shellfish illustrated in the Cupisnique visual corpus persist as symbolic species in north coast iconography.

#### 5.6.1 Fish

There exists a sampling of modeled fish in the Cupisnique iconographic repertoire. There are at least two stirrup spout bottles that illustrate elongated fish with two extensions at the sides of the head and a vertical tailfin; they both derive from the Razzetto collection (Castillo and Pardo 2009: Cat. 14, 16). The first example appears on a late Chongoyape style stirrup spout bottle (Fig. 5.109). The elongated body, triangular head and extensions from the mouth clearly recall the *life* (*Trichomycterus* sp.), a local catfish species that averages nineteen centimeters long and thrives in freshwater schools (Fig. 5.110). The second vessel is a late single spout bottle that presumably derives from Puémape (lower Jequetepeque Valley). It represents two modeled fish curling in opposite directions (ibid.: Cat 16). The authors identify the fish as *life* (*Trichomycterus* sp.) and note (as in the Chongoyape example) the natural curve of the fish as if swimming. They further cite that such freshwater fish abound in the rivers during times of abundant water and concentrate in small pools along with freshwater shrimp during the dry season (ibid.)

In Moche iconography, the same catfish appear throughout the visual media, and they are often stylized in similar fashion to the early Cupisnique examples. The fish images often boast just a triangular head and two extensions from the mouth as a repeated motif (Bourget 2006: Fig. 1.47, 1.50). These comparative forms reinforce the presumably early symbolic appropriation of these abundant fish species.

Based on his work at Puémape, Elera (1998: 265) posits that certain ceramic bottles modeled as fish represent the angel shark, which was common in the faunal remains. One oxidized stirrup spout bottle, which presumably derives from Puémape,

may exhibit a modeled angel shark (*Squatina* sp.) (Fig. 5.111). The eyes boast elongated lines connecting to the nose and extending to the back of the head. A few fins are modeled along the upper right and lower left sides, and its mouth is rendered in detail on the underside of the vessel (Fig. 5.112). Another stirrup spout bottle from the Larco Herrera Museum appears to represent the same fish, possibly an angel shark (Fig. 5.113). The head is triangular, with a clear division down the front and incised triangular eyes. Similar to the preceding example, the tail wraps around to create a circular form. The image has an unnatural left arm modeled in the center. These two examples appear to be the most complex images of this category of fish. Although I remain quite tentative as yet on this identification of angel shark for these vessels, their impressively modeled forms forces consideration of their symbolic role in the iconography.

Images of natural and stylized fish appear in monumental friezes and sculptures from the early through late Formative Periods. Large relief images appear on the frontal façade of Cerro Sechín by the Early Formative Period.<sup>36</sup> A sculpture from the Gallery of the Ornamental Beams inside the central monument at Chavín de Huántar boasts a similar fish surrounded by cross designs (Burger 1992: Fig. 188), as does the Tello Obelisk sculpture (Fig. 1.8). Such monumental images of fish likely symbolize productive aquatic environments.

### 5.6.2 Shellfish

As Larco highlighted early on in support of coastal developments (1941), the Classic Cupisnique ceramics represent modeled shellfish with certain naturalism. Larco publishes two stirrup spout bottles with modeled images of shrimp (1941: Figs 18, 126). The first is a graphite-painted bottle with opposing colored bands running horizontally across the body and modeled legs (Fig. 5.114). In the second example, Larco notes the unnatural absence of legs (Fig. 5.115). The bottle is a polished monochrome dark brown

vessel. These two ceramics provide the only known instances of modeled shrimp, which are significant for their ecological association. Shrimp populations flourish in the warm currents usually north of the Gulf of Guayaquil and along the Peruvian coasts during El Niño conditions (Bourget n.d). Along with crabs, Junius Bird mentions the fishing of shrimp in the freshets, where excess irrigation runoff feeds into the ocean (1985). The shrimp thus may reference warm northern currents, as well as times of abundant water.

Another known Classic Cupisnique ceramic bottle features a modeled shellfish, presumably a small crab species (Fig. 5.116). The crab is fully rendered with eight legs, two large pincers, a round body and eyes. The bottle is a polished dark monochrome with no signs of additional decorations. In a very general sense, the crab compares to other known representations from Formative Period coastal deposits. An incised whalebone snuff tray from Supe, probably dating to the Middle Formative, features a supernatural crab figure with pincers and radial arms recalling the layout of the north coast supernatural spiders (Burger 1992: Fig. 86). In contrast, a highly naturalized modeled gold crab was associated with the second looted burial at Chongoyape, which contained the modeled rodent ceramic and likely dates from the Late Formative (Lothrop 1941).

Finally, in monumental contexts, Ravines has posited a shellfish identity to a mural image from Garagay, which form features pincers to the front and a segmented body and legs (Burger 1992: Fig. 43). Salazar-Burger and Burger (1983) propose that the representation is rather a spider in relation to the north coast visual program. As the whalebone snuff tray images suggests, however, there may be conceptual overlay between the pincers and body of the shellfish and spider in the Garagay mural image.

### 5.6.3 Starfish

A number of bottles in Cupisnique style exhibit radial designs that spiral up at the ends around the vessel body. Occasionally, the ‘arms’ are decorated with circular or even

appliqué concentric circle elements, and in one instance a dark oblong feature extends from the center. Alva identifies these ceramic images as either an octopus or starfish (1986: Fig. 148, 152, 155, 156, 166, 168, 311). The bottles generally display only four or five radial curls around the vessel body, supporting the starfish interpretation. One vessel boasts the circular suckers of starfish or octopus; however, a dark ‘foot-’like extension at the center likely indicates the former (Fig. 5.117). Nevertheless, the octopus features so markedly in later Moche iconography that the curled arms and appliqué ‘suckers’ cannot be ruled out as symbolic of this group of marine animals. The radial design recalls both animal types and perhaps drew on their likeness as a symbol for the marine realm.

## 5.7 Plants

Columnar cacti are undoubtedly the most ubiquitous plants represented in Cupisnique iconography. Beyond these endemic coastal to highland plants, the majority of flora represented in Cupisnique iconography are root plants. These include the yuca (*Manihot esculenta*), yuca de caballo (*Proboscidea altheaefolia*), and achira (*Canna edulis*). The other notable plants include possible gourd and fruit plants. As with the faunal forms, there is greater emphasis given to identifiable species in contrast to the more generic renditions of others.

### 5.7.1 Cactus

As mentioned above, columnar cacti appear in a number of visual contexts, boasting close affiliation with the feline-cactus theme discussed above. Given his research in Moche iconography and modern *curandero* practice (Sharon and Donnan 1977), Sharon has likewise investigated the Cupisnique ceramic corpus for illustrations of cactus plants (2000). As mentioned above, the tall columnar cacti in the scenes are often

identified as San Pedro (*Trichonocereus pachanoi*), a hallucinogenic plant with a high content of mescaline that remains popular with modern Peruvian *curanderos* (Fig. 5.118). The highly potent Gigantón cactus may also have been a model for the columnar cacti forms (Elera 1993). These columnar cacti grow on fertile hillsides, in the *yunga* valley zones, and in abundance around highland jagüeyes.

Although the natural cactus stalks commonly boast 5-7 ribs, the Cupisnique ceramics often present them with four ribs, possibly due to the symbolism of four sides or four directions (Sharon 2000). In the iconography, the cacti may sport concentric circle markings (Fig. 5.119), or have them in the same scene (ibid.: Fig. 19). The concentric circle designs clearly reference the cactus role in the feline-cactus theme. Other abstract elements associated with the cacti include step designs (ibid.: Fig. 19), volutes, and isolated incised heads, a similar set as the larger feline-cactus theme.

In the archaeological record, cactus spines are found in ritual deposits at the late Middle Formative center of Garagay and a contemporary burial at Puémape. In such cases, the spines serve as needles or as figurative staves (Burger 1992, Elera 1998). Their physical use alongside representation supports the ritual consumption of these cacti species. Nevertheless, the paraphernalia of snuff trays and spoons within the archaeological remains suggests emphasis on other hallucinogenic plants applicable as snuff. Rather than illustrated strictly for its hallucinogenic properties, the cactus may have been further a critical ecological marker of fertile areas of the highlands.

### 5.7.2 Yuca

The long tuberous plants modeled in Classic Cupisnique bottles have been identified consistently as yuca (Fig. 5.120). Yuca (*Manihot esculenta*), also known as manioc or cassava, produces long multiple tubers underground while the plant may grow as tall as two meters with broad foliate leaves. There are two distinct types of manioc,



commonly known as bitter or sweet. The former boasts a high content of cyanic acid that must be purged or boiled out of the root before consumption. The latter has a considerably lower concentration and is more easily digested, with high starch content (Ugent et al 1986). Yuca is a staple crop, which can survive reasonably well through seasonal droughts or periodic inundations. Although the roots may last only a few days once they are harvested, mature plants may remain in the ground without harvest for years. The yuca crops thus provide for secure food source and high starch in the diet.

Recently, Elera (1998: Appendix 1) has rather suggested that the root plant images recall the *yuca de caballo* (*Proboscidea altheaefolia*). Identified in the Cupisnique gorge, Elera posits that the *yuca de caballo* tubers offer symbolic aspects of root plant, humid season reemergence, and liquid content, which may have played into the visual program. Although I cannot rule out the symbolic representation of this alternative root species, manioc boasts considerable presence in the archaeological record of Formative Period sites, arguing for it as the most likely representational candidate.

The Classic Cupisnique bottles generally illustrate these modeled tubers with four or more elongated roots that intertwine rather than lie evenly in a stack (Fig. 5.120-5.121; also Alva 1986: Figs. 192, 198). When these modeled tubers boast incised human heads, this suggests a significant connection between decapitation and the yuca root (Fig. 5.120-5.121; also Alva 1986: Fig. 219). This connection is reinforced by the Limoncarro Cup (Fig. 5.15), on which the supernatural spider decapitator bears a decapitated human head shaped as a yuca (Cordy-Collins 1992a; Section 5.1.2). The yuca as root plant thus associates with the theme of decapitation or sacrifice.

From Chavín de Huántar, Tello (1960) and Lathrap (1977) identify yuca roots emerging at the foot of a 'Great Image' on the Tello Obelisk. Lathrap further identifies the manioc stem with its 'eyes' located at the center of the primary figure. The manioc 'eyes' reproduce new plants when portions of the stem are planted into the ground. Lathrap thus suggests a visual metaphor, where the stem with 'eyes' emerges from the

mouth of a serpent, whose placement suggests the phallus of a 'Great Image.' The reproductive stem of the manioc thus may equate to semen. Along with the representation of an achira plant, Lathrap posits the symbolic role of this dual being as related to underground plants or the watery underworld. In line with Tello (1960), Lathrap (1977) asserts the critical role of the Tello Obelisk, including the two representations of yuca plants, as an illustration of fecundity and propagation.

Manioc tubers and their stems further appear in succeeding north coast Moche iconography (Donnan 1978: Fig. 222, 234), including mountain scenes. According to Bourget, the plants and its stems refer to concepts of sacrifice (n.d.). It is possible that such symbolism extends from concepts established in Cupisnique iconography, where modeled ceramic tubers consistently bear isolated heads.

### 5.7.3 Achira

In contrast to the yuca images, the stirrup spout bottles modeled as achira do not boast any corresponding secondary thematic motifs. The vessels are naturally modeled into the bulbous forms of the tuber (Alva 1986: Fig. 209; Bonavia 1994: Fig. 30). Repeated stripes provide a sense of the texture, although they lack the characteristic triangular pattern represented on later Nasca ceramics (Yacovleff 1938).

Along with sweet manioc, achira (*Canna edulis*) is one of the most abundant early crops of the Formative Period (Ugent et al 1984). Archaeological remains from the Casma Valley suggest the baking of the root, with the successive slicing and peeling of the outer skin and scooping out of the inner edible core. Similar to manioc in many regards, achira is a hardy starch plant that may be grown annually. The roots may be left in the ground for an additional two to three years for continued growth and a secure food source. Once harvested, the achira roots – like the yuca roots – begin to rot quickly and must be consumed. The new crops may be planted through cuts of root bulbs that extend

from the large central base, which may grow to as much as two feet long. The achira and yuca roots thus appear to reflect concept of underground sustenance.

#### 5.7.4 Gourds

It may be presumed that a number of plain Cupisnique bottles and jars refer to gourd forms (*Lagenaria sp.*), from which such early ceramics were modeled (Fig. 5.17). Occasionally, the modeled ceramics are explicit in mimicking gourd forms, with central nubs and radial lines. As seen above, the gourds may further appear with a painted net design around them, suggesting their function as floats for cotton fishing nets (Fig. 5.68). Such a fishing net with gourd floats was recovered *in situ* from the Preceramic occupations at Huaca Prieta (Bird, Hyslop and Skinner 1985), supporting this interpretation.

As mentioned above, Cordy-Collins further has identified the multi-lobed design of a ubiquitous type of Classic Cupisnique stirrup spout bottles as recalling a netted gourd (1992; Fig. 5.17). Bottle gourds certainly served as precedents and models for ceramic bottles. Although some scholars have identified the multi-lobed bottles more generically as fruit forms (Lapiner 1976; Toshihara 2002), the close parallels to gourds in the spider decapitator scenes presents the most substantial degree of interpretation. In later Cupisnique and Chongoyape bottles, the rendition of isolated heads in net patterns appears more explicit. This supports the identification of these Classic Cupisnique bottles as netted gourds, with the gourd forms playing a crucial symbolic role.

The bottle gourd appears on the Tello Obelisk at Chavín de Huántar (Lathrap 1977; Fig. 1.8). The plant is rendered with flowers and gourds on the back of one 'Great Image.' Lathrap notes its inclusion then on the half of the dual image that recalls seed plants, or above-ground plants. The bottle gourd thus occurs along with chili peppers, achira, yuca and peanuts on this highly selective sculptural representation.

### 5.7.5 Fruits

There are only a few representations of fruits in Classic Cupisnique ceramics. The most numerous examples portray the pepino (*Solanum muricatum*). Other examples include possible chili pepper (*Capsicum sp.*) and squash (*Cucurbita sp.*). By the Formative Period, such plants already had a long history of coastal cultivation.

Pepino: Cupisnique modeled images of pepinos also appear often in the graphite-painted style, such as the bottle from the Gallery of the Offerings (Lumbreras 1993: Fig. C-c). The fruits are identifiable by their striped bi-coloration and oblong shape. They are sweet fruits of high liquid content that resemble Old World cucumbers – hence their common name in Spanish. Pepino plants are perennial and grow well with irrigation in the fertile valleys along the coast. Unlike the seed cultivation of other fruit plants – such as chili peppers, squash, and bottle gourds – pepino plants are cultivated best through vegetative propagation, or the planting of stem cuttings. Vegetative propagation is shared by the pepino plants and tubers, as well as columnar cacti. Perhaps the Cupisnique people noted something symbolic in the cutting up and burial of an original plant part in order to cultivate more plants.

Chili Pepper: In Classic Cupisnique ceramics, chili peppers appear in modeled form, on the graphite-painted style or polished red bottles (Alva 1986: Fig. 210). In the sculptural program at Chavín de Huántar, Lathrap cites the presence of chili peppers on the Tello Obelisk (1977: 342) (Fig. 1.8), noting that such above ground seed crops pose a duality with the represented root crops of manioc, achira, and peanut. While consumed as food (Bird, Hyslop and Skinner 1985), chili peppers may have also adopted possible ritual use

through early practices associated with fire pit chambers. At La Galgada, Grieder and Mendoza suggest that chili peppers were ceremonially tossed into a central fire pit of an enclosed chamber in order to evoke a striking effect on the sinuses and perhaps affect tears (1985: 107). To date, the fire pits at La Galgada remain the only example of such posited ritual practice.

Squash: Only a few Classic Cupisnique stirrup spout bottle illustrate a warty squash, or *loche* (*Cucurbita* sp.) (Fig. 5.122). These fruit forms do not appear in association with any complex motifs in Cupisnique iconography, nor on monumental sculptures such as the Tello Obelisk. Therefore, their meaning in the Classic Cupisnique repertoire remains uncertain. Nevertheless, squash produce many edible seeds and feature into Moche iconography, providing avenues for potential future research and analysis.

#### 5.7.6 Legumes:

The Classic Cupisnique bottle modeled as a monkey with a peanut body is the only ceramic example in this category (Fig. 5.80). Nevertheless, the image may serve to compare with the peanut forms identified on the sculptures at Chavín de Huántar. Tello identified three peanuts emerging from one foot on the Tello Obelisk (1960; Lathrap 1977). As a root plant, the peanut appears along with achira and manioc on the same Great Image, reinforcing the importance applied to root crops in Cupisnique iconography.

Peanuts (*Arachis hypogaea*) are known from the central and south coast since Preceramic times. Their presence on the north coast, however, begins in the Middle Formative. Peanuts have been recovered from excavations at Huaca Prieta in the Chicama Valley, Gramalote and Caballo Muerto in the Moche Valley (Bird, Hyslop and Skinner 1985, Shelia Pozorski 1979).

#### 5.7.7 Final Observations

In contrast to the faunal images, the modeled plants such as tubers, gourds and fruits largely pertain to the naturalizing tradition of the Classic Cupisnique styles. Significantly, the plants illustrated on the Tello Obelisk from Chavín de Huántar comprise largely the same sample found in Classic Cupisnique ceramics.

Although stylized forms of such plants may exist in Late Cupisnique, the current corpus suggests that such plants do not continue to bear a substantial role in Late Formative iconographies. This situation is supported by the relative paucity of plant representations within the repertoire of Karwa textiles (Cordy-Collins 1976). The only exception is the cactus, which continues to appear in Late Formative styles alongside the feline forms and raptorial avian figures.

### 5.8 Geometric and Abstract Designs

The most common geometric and abstract motifs in Classic Cupisnique iconography include concentric circles, step designs, volutes, pulse motifs and Greek cross designs. Such geometric motifs are naturally popular across the Andean visual traditions and basic in their overall design. In the Formative Period visual tradition, however, they appear to correspond closely with certain representational forms. It is these associations that are worth highlighting, to evince conceptual links across the subjects.

#### 5.8.1 Concentric Circle

The concentric circle is a geometric motif defined by a smaller circle appearing within a larger circle. In Classic Cupisnique and Late Formative style ceramics, it is

perhaps the most ubiquitous abstract element. Variations of the design include incised circle-and-dot and concentric-circle-and-dot motifs, as well as appliqué circles. Throughout this chapter, I have alluded to a possible symbolic meaning assigned to the concentric circle motif, as it relates to selective figural forms. This aspect merits further discussion here.

The concentric circle motif appears on a particular set of figural forms in Classic Cupisnique ceramics (Table 5.2).

Concentric Circle Motif		
Feline	Serpent	Cactus
Strombus shell	Monkey	Small Bird?

Table 5.2

Although each figural type may appear without the concentric circle markings, the motif associates regularly with these forms. It remains absent from other figures such as llama, rodents, parrots, owls, shellfish and root plants. On the feline and serpent forms, the concentric circle markings have been interpreted as natural referents to the pelage or spotted markings of these animals (Lathrap 1971). Yet the *Strombus*, monkey and small birds with the abstract motifs are more difficult to explain in this manner. It would seem rather that the circular markings designate these figural forms as related in concept, a concept that was initially – or became through time – intricately linked with the abstract motif. This would explain the increased ubiquity of the concentric circle motif in Late Formative ceramics.

Many scholars have posited that the concentric circles reference the feline cult in its regional expansion the late Formative Period (Larco 1941). Although the circle motif is intimately related to the feline in Classic Cupisnique and early Chavín art, their illustration on cacti and serpents support a more expanded use of this design in relation to

the broader feline-cactus theme. As discussed above, the theme possibly recalls a fertile ecology, as well as capture associated with sacrifice. The concentric circle motifs around the isolated heads underneath a modeled toad allude to both concepts (Fig. 5.93), thus supporting this association. The circle motif then appears on monkeys, *Strombus* shells and small birds. It is possible that these species, such as *Strombus* trumpets, also pertain to the feline-cactus theme, or its ritual component. The concentric circle thus may serve as an index of a broader concept, ideological principle, or ritual performance.

Burger proposes that a prominent criterion for the spread of the Chavín horizon is the related ‘Janabarriu-style’ ceramics across the highland and coastal regions (1993). The Janabarriu ceramics often display circle motifs – concentric circles, circle-and-dots, and stamped circles – as well as ‘S-shape’ elements. Substantiating this theory, such circle motifs become common in the Layzón Phase ceramics in the Cajamarca region (Terada and Onuki 1985) and in Pacopampa Chavín Phase in the northern highlands (Seki et al 2006). Likewise, Elera recovered from burial at Morro de Etén a fine polished bowl with pouring lip and stamped concentric circles (1986). The ceramic assemblages of the Chongoyape, Late Cupisnique, and Chavín styles thus evince the contemporary adoption of the concentric circle motif as a principal decorative element. If this period and its ceramics mark the spread of a Chavín horizon, then it might be expected that the disseminated designs have well established and profuse symbolic meaning, which likely extends from ideology established in the Middle Formative Period.

### 5.8.2 Volute

The volute may vary from a slight curl to a robust spiral, and it appears often with the feline-cactus motif. The volute may occur at the terminus of a vertical element (sometimes rendered as a cactus) that divides the scenes. In such cases, it bears a swirl-like design that recalls a snail shell (Fig. 5.1). Cordy-Collins identifies this feature as a



whirlpool element, or *remolino* (1996), a geometric pattern envisioned through the use of hallucinogens. There might be a sort of correspondence between such whirlpool design and the snail shell, given the common consumption of land snails (*Scutalus* sp.) and their connection to the hallucinogenic Gigantón cacti (Elera 1993).

The volute is also regularly paired with a step design or zigzag. In such cases, the volute often terminates in a simple curl (Fig. 5.1).<sup>37</sup> As mentioned above, Elera suggests that the paired volute and step design recall the water and mountain respectively (1993). That the simple volute recalls water or a wave is supported by scenes of sequential volutes set in a wave-like pattern. One Late Formative Period bottle may even suggest a double wave motif, based on the contrast in polished and rough texture (Lavalle and Lang 1981: Fig. 111). The step design further recalls terraced levels, whether natural or in monumental construction. Therefore, the interpretation of the stepped volute as combining mountain and water – land and sea – seems tenable in the context of the feline-cactus program.

The symbolic pairing of the stepped volute design continues into Late Cupisnique styles, such as the bottle offering at Poro-Poro (Alva 1988: Fig. 34). It further boasts popular use in succeeding Moche iconography on the north coast (Bourget n.d.). Based on the current analysis, the Moche scenes may present close iconographic parallels to the feline-cactus theme established in Cupisnique iconography.

### 5.8.3 Pulse Motif

A unique design appears on a number of Classic Cupisnique bottles. An incised line runs around the vessel body, with sharp upward and downward peaks interceded by a short horizontal path (Fig. 5.106). Since the design resembles the register on modern cardiographs, I have continued with the simple though perhaps anathematic name.<sup>38</sup> The pattern may appear alone, with other abstract designs, or with figurative forms on

Cupisnique bottles. The abstract designs consist of trefoil elements (Alva 1986: Figs. 147, 231) and step designs with central concentric circles (ibid.: Fig. 232). The figurative designs include simple incised profile avian figures (ibid.: Fig. 235; Larco 1941: Fig. 109) (Fig. 5.106), as well as profile isolated human heads (ibid.: Figs. 149, 218, 228, 229, 230) and even serpent heads (ibid.: Fig. 154). While the heartbeat pattern is largely found on Cupisnique bottles, the pattern also occurs on bowls (ibid.: Fig. 410), including ones from highland Pacopampa during the Middle Formative (Morales 1980).

The pulse motif largely pertains to Classic Cupisnique incised polished monochrome vessels, and it does not occur as a decorative motif on figural forms. The exact meaning of this pattern (if one was intended) thus remains uncertain. In textile production, however, there appears a close visual parallel, which may be instructive given the visual references to fishing nets and woven bags. In the impressive textile study by Junius Bird and his colleagues on the Preceramic materials at Huaca Prieta (1985: 160), the ‘pulse’ pattern appears in the Condor Type woven textiles. These textile types are for figural representations. The pulse design is a natural result of creating angled lines within the woven cotton fabric, or transposed warp movement. Such textile production apparently continued throughout the occupation at Huaca Prieta and often composed avian forms. Perhaps the pattern appropriated a certain symbolic value in reference to weaving through its inclusion on Cupisnique bottles. Its use would thus parallel similar referents to S- and Z-spun guilloche patterns and net designs in the iconography (Burger and Salazar-Burger 1996), as symbolic of the established textile arts.

#### 5.8.4 Step Design or Zigzag

The step design, or zigzag, is a common motif during the Middle Formative in the north coast and highlands. It may appear as a simple zigzag pattern around the rims of open bowls during Late Huacaloma style or as stepped pattern around Classic Cupisnique

bottles . The stepped design further appears in the feline-cactus scene, associated with the volute motif and as likely antecedents to the stepped volutes of Moche iconography (see above; Fig. 5.1).

In Chapter 4, I addressed the presence of zigzag designs during the Late Huacaloma period around the Cajamarca basin. The ubiquitous use of this motif in these Formative Period ceramics and monumental centers supports the chronological placement and interpretation of the Cumbemayo Canal. The zigzag pattern is the most repeated visual element of the canal design and its associated petroglyphs, alluding to the symbolic importance of this motif. It further appears common on the Late Huacaloma polychrome post-fire bowls. Such bowls with zigzag patterns are common through the Jequetepeque region (Larco 1941).

When the stepped pattern is rendered symmetrically, it gives the impression of a mountain form or stepped monumental building. Such a design appears on the Classic Cupisnique bottle recovered from the intrusive tomb at Cerro Blanco (Onuki 1995: Fig. 16). The bottle also exhibits concentric circle elements within the stepped designs, as well as isolated human heads. The combination of such motifs suggests their symbolic affiliation, in this case with the decapitation theme (heads) and feline-cactus theme (concentric circles).

The stepped pattern also features in one scene of modeled architecture. The design is rendered on either side of an angled roof structure, which composes a single building marked by an incised central staircase (Bonavia 1994: Fig. 9). Another ceramic bottle represents a similar structure with angled roof; however, the roof rather exhibits a crosshatch pattern. One other bottle portrays architectural design: a vessel cited by Shimada and his colleagues in reference to Huaca Lucia (1982). The staircase is inset into a basal platform and leads to a central building with modeled wooden beams composing the roof. As Shimada suggests (*ibid.*), this ceramic may offer insight into the perishable structures that once existed atop the Middle Formative monumental centers. The step

design on the first example thus supports a cross-comparison between mountain settings and ceremonial structures.

#### 5.8.5 Cross

The Greek cross is not extremely common in Classic Cupisnique iconography. Yet its presence at in stone sculptures and petroglyphs at Cumbemayo and in the sculptures at Chavín de Huántar force consideration of its meaning in these visual programs. At Cumbemayo, the cross design appears along the canal walls and in the ‘Sanctuary’ along the first section (Chapter 4). The crosses are in high relief, carved out of the natural rock (Fig. 4.57-4.58).

At Chavín de Huántar, Colin McEwan has highlighted the similar design of a cross with central circle in the iconography of the Lanzón and Tello Obelisk (Fig. 1.7-1.8). He assigns the Inca term ‘ushnu’ to the design, applying to the design the related Inca symbolism as a centralizing element or navel (1992). The cross on the Lanzón occurs on the upper protrusion, with the central depression possibly serving as recipient for liquid oblations poured down the central channel axis. The cross design on the Tello Obelisk appears before the foot of a ‘Great Image. Finally, four crosses frame a sculpted fish in the Gallery of the Ornamental beams (Burger 1992: Fig. 188). The cross design is so prevalent at Chavín de Huántar that Toshihara argues it as “clearly related to Chavín culture.” (2002: 440).

Generally speaking, the Greek cross appears to be a rather consistent feature in north highland art during the Formative Period. This includes the Wacheksa style ceramic jars recovered from the Gallery of the Offerings (Lumbreras 2007: Fig. 347-348), a style which presumably derives from the north. The jars bear red cross designs over an orange background. Although their meaning remains unclear, such Greek crosses are specifically rendered in these ancient Andean representational programs.

## 5.9 Tying Together the Visual Corpus

Certain secondary figural elements also repeat in the Classic Cupisnique iconography, appearing with the primary representations. They function like the concentric circles, which may create correspondence between the visual forms of felines, monkeys, and birds in the iconography. Yet the representational features offer more tangible entry into the meaning of this proposed integrated visual system. The most identifiable and repeated elements that appear in diverse iconographic contexts include isolated heads, net designs, and wrinkle faces on anthropomorphic figures. Perhaps the most direct form of linking the symbolic visual system is the creation of composite forms, in which the primary figures appear mixed together, presumably based on their symbolic association.

### 5.9.1 Isolated Heads

Isolated heads appear in the visual corpus in two distinct manners – incised and modeled. The most ubiquitous forms are the incised anthropomorphic heads, which occur often as secondary elements on ceramic vessels. In contrast, a number of Classic Cupisnique bottles illustrate modeled heads of certain anthropomorphic and animal figures. The modeled heads may appear in isolation or in groups – often of four – modeled around the vessel base. In this section, I address both modes of isolated heads in Classic Cupisnique iconography.

Incised Isolated heads: The incised isolated heads are often identified as severed heads given visual parallels to examples from Cerro Sechín and Chupacoto, which may exhibit chevron cut marks at the throat (Fig. 1.18; Bischof 1994: Fig. 21a, b). Throughout this

chapter, I have referred to these near ubiquitous forms as simply ‘isolated heads,’ in order to maintain certain objectivity regarding their meaning. Unlike examples from the Early Intermediate Period Nasca and Moche cultures (Cordy-Collins 2001; DeLeonardis 2003), the Formative Period currently offers scant archaeological evidence of decapitation or severed heads. Notable exceptions include the decapitated female at Punkurí and the isolated human cranium deposited at Chavín de Huántar (Burger 1984, 1992).<sup>39</sup> The term ‘isolated heads’ yet allows for their role as symbols of decapitation while maintaining a possible broader metaphoric field of interpretation.

Incised isolated heads appear most predominately with decapitator images. The heads are often held in the right hand by decapitators, which present anthropomorphic and animal qualities (Fig. 5.12, 5.14-5.15, 5.20). The heads may also run across, or occur at the joints of, these primary supernatural figures (Fig. 5.14, 5.20). On the Dumbarton Oaks plate and Limoncarro Cup, the heads further configure within a netted gourd design along the back (Fig. 5.12, 5.15). As discussed above, this comparative illustration of isolated heads on gourds supports a thematic reading of the iconography (Fig. 5.17), presuming a conceptual connection.

The format, style and placement of the isolated heads in Cupisnique visual culture recall their design in sculptural programs of the north-central coast, particularly at Cerro Sechín in the Casma Valley. At this center, the sculpted heads boast mostly closed eyes and occasional chevron cuts at the neck, marking the severed head of dead individuals (Tello 1956). The fully anthropomorphic figures that process in profile around the monumental building boast pendant eyes with stripes, a pillbox-shaped hat, and clubs with a stepped pattern (Fig. 1.17). As mentioned above, these features notably appear on the north coast Spider decapitators. Similar to the north coast Decapitators, the Cerro Sechín individuals also host streams of human heads across the body (compare Fig. 1.17 and 5.20). The iconographic parallels thus support a conceptual correspondence across

these programs, which highlight severed heads associated with supernatural anthropomorphic figures.<sup>40</sup>

While the appearance of isolated heads on netted gourd bottles and modeled yuca ceramics are seen to correlate with the decapitation theme (Cordy-Collins 1992a), their illustration alongside modeled parrots (Fig. 5.96), step designs, and *Strombus* shells (Fig. 5.23) prompts further exploration. The isolated heads are largely ubiquitous with the addressed subjects above, possibly excepting the modeled llamas. Similar to the concentric circle motif, the isolated heads highlight certain correspondences within the visual program. In other words, their placement alongside certain representations may call out figures that correspond to the decapitation theme or its presumed concept of sacrifice. The ubiquity of such isolated heads certainly reiterates these concepts throughout Cupisnique iconography (Table 5.3).

<b>Isolated Head Motif</b>	
<b><u>Incised on</u></b>	<b><u>Associated with</u></b>
Manioc	Bird
Gourd	Feline
Human	Cactus
<i>Strombus</i>	<i>Strombus/Spondylus</i> dyad

Table 5.3

Modeled Isolated Heads: In Cupisnique iconography, the head was highlighted as the most defining feature of figural forms. The Cupisnique bottles thus vary from complete modeled forms to modeled heads, with both types providing species identification. A

brief review of the figural forms suggests that land animals and birds receive similar visual treatment. Nevertheless, certain species appear to be rendered in more comparative formats. For example, modeled heads of owls, wrinkle faces, and double-eye motifs may appear on ‘moon’-shaped bottle bases (Dioses 2000: Fig. 51). It remains for future investigations to determine whether only certain animals were rendered as isolated modeled heads.

A number of Classic Cupisnique bottles combine four isolated heads on one bottle. The heads are often displayed around the vessel body. In one notable example, the four visages of an owl are combined through the shared use of the eyes (Fig. 5.100). Another bottle from the National Museum of Scotland displays a doughnut-shaped base and four modeled heads set in axial symmetry on top (Fig. 5.123). In this case, two heads are rendered as composite raptorial avian faces. The other two are more natural human heads with almond-shaped eyes and simple coiffures with sideburns. Another bottle presents the same layout; however, this time all four heads present natural human forms (Lavallo and Lang 1981: Fig. 119).

The human heads closely recall the design of full-figured modeled individuals, such as the seated person with a knife and the mutilated captive (Fig. 5.46, 5.52). The stylistic similarity suggests their regional and possibly symbolic correspondence. Extending the comparisons more broadly, the play between modeled human heads and composite avian forms further recalls the series of tenoned heads at Chavín de Huántar. There is a clear contrast between natural and supernatural, human and avian.

### 5.9.2 Net design

The net design pertains most readily to the decapitation theme discussed above. Clearly rendered net patterns appear around isolated human heads in a number of scenes, including the Spider Decapitators. The netted heads on the Spider Decapitator images



likely parallel the numerous Classic Cupisnique bottles, which render isolated incised heads on bottles shaped as netted gourds. They also recall the use of cylindrical netted bags, which appear not only in the archaeological record but also illustrated on a Cupisnique ceramic figure (Fig. 5.54; Larco 1941: 193). Yet the isolated heads may also appear on bulbous forms in the center of a modeled bowl or plate (Fig. 5.124). Such variations have led some investigators to posit them as generic fruit forms (Toshihara 2002). Therefore, the elements that support the net design identification bear discussion.

For one, a number of ceramic bottles illustrate nets, with the interwoven pattern clearly illustrated (Fig. 5.89). The styles of such bottles generally postdate the Classic Cupisnique phase. The bottles suggest that the netted head concept continued in symbolic weight and perhaps became more explicit in its presentation. For example, a net design with isolated heads appears on a gold crown from Tomb 1 at Kuntur Wasi (Fig. 5.26), associated with a prestigious item of adornment at this highland Cupisnique center.

The second line of supporting evidence is the occasional inclusion of a spun rope in the scenes of netted heads. The rope often extends from the center of the bottle top, and it implies a) a reference to textile production and b) a symbol of capture (see note 32). Similar ropes appear around the necks and wrists of captive victims. A twisted rope pattern further runs around the border of a Spider Decapitator scene (Fig. 5.12). Along with the guilloche pattern and pulse motif, the rope and net design substantiate the symbolic references to textile production. Therefore, the symbolic and ritual use of nets and other textiles during the Middle Formative bears future scrutiny, as more preserved examples emerge from the archaeological record.<sup>41</sup>

### 5.9.3 Wrinkle Faces

During his excavations at Barbacoa in 1939, Larco Hoyle recovered a jar displaying a wrinkled face in Tomb 19 (1941: Fig. 53), a Cupisnique burial of an adult

individual of unknown gender. The jar was face down next to a hexagonal-shaped Classic Cupisnique stirrup spout bottle. Larco (and others since him) identifies the bottle as the image of an aged woman, presumably based on the wrinkles, inset nose and pursed mouth. The face is heart-shaped and only on one side of the jar. It bears close similarity with another head set on a ‘moon’ shaped base (Fig. 5.125). Finally, a trapezoidal stirrup spout bottles illustrate wrinkled faces as independently modeled heads. It pertains to the Schaffhausen Museum and exhibits a similarly inset nose as the previous examples (Fig 5.126). Yet the face evinces some warping, likely resulting from poor firing conditions.

Regarding fully modeled forms, I have already noted the presence of wrinkles on two distinct sets of anthropomorphic figures (Table 5.4).

<b>Wrinkle Faces</b>	
Seated Individuals	Captives

Table 5.4

The facial design – with almond-shaped eyes, pointed nose, and pursed lips – is strikingly similar across all three groups. Since the modeled figures display triangular loin cloths, it may be presumed that such wrinkled face individuals are generally male.

As suggested above, the seated individuals with objects and the captive victims may imply a ritual sequence. Where the top-knot feature conceptually links two such actors, the wrinkles on the other figures may provide a similar visual device. This presumption – that the wrinkled faces and top-knot hairdos signify a related set of individuals in progressive roles or actions – is supported by the tenoned head program at Chavín de Huántar. A number of the sculpted tenoned heads reflect simple anthropomorphic forms, while others present wrinkles and top knot hairdos (Fig. 5.39-5.41). These features thus occur within a sculptural group that investigators have cited as presenting a sequence or transformation (Burger 1992).

In addition to their use as visual cue, the wrinkled faces clearly bear a significant meaning within Classic Cupisnique iconography. Notably, the bodies of the full-figured wrinkle-faced individuals yet reflect a youthful physical condition (Fig. 5.44-5.45, 5.49-5.52). Therefore, the wrinkles may be an overt reference to a concept of ancientness or to a mythical past of the represented figures. The application of wrinkles to certain individuals, perhaps as referents to the past or ancient tradition, continues into Moche iconography on the north coast (Donnan and McClelland 1979). It thus serves as an effective visual medium for connecting this group of individuals and their continuity in north coast iconography.

#### 5.9.4 Composite forms

By composite forms, I refer to the more complex representations that imply the selective blending of specific animal and anthropomorphic features. The images may illustrate a complete figure or simply a head, with the application of various symbolic elements. The independent elements may be natural or stylized in form, but together they create a supernatural or composite design through their unnatural combination.

The composite forms appear in Classic Cupisnique ceramics; however, their greatest proliferation and most complex permutations pertain to the Late Formative styles. For the Classic Cupisnique style, the complex Decapitator images from the north coast stone bowls provide the most explicit examples of composite forms. These include spider, avian and feline/human forms (Section 5.1.2). By the Late Cupisnique style the composite forms generally display head crests, stylized eye forms, fanged mouths, and other symbolic features (Fig. 5.104-5.105). Based on their unnatural representation, such figures or faces are generally identified as ‘supernatural.’ Yet the most common forms present avian beaks and subsidiary serpents, with a central fanged face.

## **5.10 Head Bearer Ashlar at Chavín de Huántar**

Burger (1992) and Salazar and Burger (2000) have suggested that the theme of decapitation and sacrifice prevalent in Cupisnique iconography diminishes at Chavín de Huántar, in lieu of increased emphasis on shamanic transformation. At Chavín de Huántar, however, there have been few investigations of the anthropomorphic figures that appear around the monumental site. The individuals regularly bear ritual objects or hunting implements, suggesting their role in the early visual system.

### **5.10.1 Anthropomorphic Hunters and Decapitators**

One sculpture from the monumental center boasts an anthropomorphic hunter holding an isolated head in his right hand behind him (Fig. 5.127). The head appears with open eyes, and it is held by an implied full palm grip. The hunter is identifiable by his spear and atlatl held to the front in the left hand. A fragmented sculpture of a similar anthropomorphic figure with spear and atlatl was recovered by Tello (1960: Fig 85), which may have once boasted a similar isolated head. These sculptures readily compare with an ashlar from Yurayaku, five kilometers from Chavín de Huántar (Fig. 1.15). The ashlar represents a similar anthropomorphic figure with pillbox hat and feathered back gear. He holds an isolated head by the hair in the right hand. The hair notably loops above the hand while three streams of blood emit from the neck below. The pillbox hat, the streams of blood and the face of the isolated head all suggest close stylistic parallels with the sculptural program at Cerro Sechín (Fig. 1.17).

The theme of the severed head held by this figure, in fact, may derive from this earlier north-central coastal center. This argument is supported by the recovery of two stone sculptures in the town of Chupacoto in the Callejón de Huaylas west of Chavín de Huántar. The two sculptures exhibit severed heads, with chevron cuts at the throat (Bischof 1994: Fig.21a, b; Thompson 1962). The eyes are open, and the hair forms a loop

atop the heads. Along with the Chavín and Yurayaku sculptures, these isolated stone images suggest the influx of trophy head motif into the Chavín region from the coast.

#### 5.10.2 The *Head Bearer* Ashlar

At the 2008 Society for American Archaeology meetings, I presented a paper proposing that a sculpture in the Circular Plaza further represented an isolated head held in the hand by a primary individual. The sculpted ashlar occurs on the upper row of stones on the northwest side of the plaza (Fig. 5.128-5.129). Only one of a presumed original pair exists, and it remains badly eroded since its recovery. Unlike the profile anthropomorphic figures that follow to the north – those bearing *Strombus* trumpets, *Spondylus* shells, and columnar cacti (Fig. 1.11, 5.27-5.28) – the individual is frontal. Tripart elements radiate to the four corners of the framed ashlar. The figure wears a pointed headdress, has pendant eyes and flaring nostrils. The only other recognizable form is a looped element that appears to the right side near the shoulder. Four lines define the loop, which Lumbreras tentatively identifies as a staff or rope (1977). The tip of a thumb and forefinger may appear just below. Based on the looped element above the hand, I suggest that this feature is an isolated human head held by the main individual, which I termed the Head Bearer ashlar.

The identification of this head-bearer individual within the Circular Plaza sequence is based on three critical elements: two formal and one contextual. First of all, the loop design closely recalls the loops atop the Chupacoto severed heads and the Yurayaku trophy head (Bischof 1994: Fig. 21a,b; Fig. 1.15). Such loops over isolated heads are further present at Cerro Sechín (Tello 1956: Fig. 98), on Classic Cupisnique ceramics (Fig. 5.130), and on numerous bowls from Pacopampa (Morales 1980; Rosas and Shady 1970). The looped element may relate to the top-knot hairdos, for example on Chavín tenoned heads (Fig. 5.39-5.40). These comparative iconographic programs of the

Middle Formative argue for the likely connection between the looped element above the hand grip and a severed head once pendant below.

The frontal presentation of the main individual further supports this interpretation. As noted above (Section 5.1.2), the Cupisnique decapitator figures – those bearing isolated heads – often boast an X-pattern of presentation. The X-shape may be composed through tri-leaf elements, mouth bands, or spider legs. The Circular Plaza ashlar exhibits the same tendency toward an X-shape, with the radial elements presented as tri-part extensions (Fig. 5.128-5.129). The looped element also appears over the right hand, similar to the Cupisnique decapitators.

### 5.10.3 Circular Plaza Visual Program

Regarding the contextual argument for the Head Bearer ashlar, I have discussed above the close correspondences between the complex visual themes in Classic Cupisnique iconography and likewise the Circular Plaza sculptural program. I have noted that the Cupisnique *feline-cactus theme* affiliates with the Cactus bearer ashlar and the bottom row of sculpted felines (Fig. 1.11-1.12). The dual shells in Classic Cupisnique stirrup spout bottles further recall the paired *Spondylus* and *Strombus* bearers of the Circular Plaza program (Fig. 5.27-5.28). If the feline-cactus theme and dual shells were appropriated into the plaza mythical sequence or visual program, then it would be reasonable to expect the *decapitation theme* illustrated in this context as well (Fig. 5.128).

In Classic Cupisnique iconography, the a) feline-cactus theme, b) decapitation theme and c) duality evinced by the *Strombus* and *Spondylus* shells or double-eye motif are concepts intimately interrelated within the ideological program. This would suggest that the concepts may not be easily rent apart or appropriated in pieces by other centers. The identification of comparisons between the tenoned heads and sculpted cornices at Chavín de Huántar with Classic Cupisnique ceramics substantiates this argument. While I

thus arrived at the identification of the Head Bearer ashlar without any preconceived comparisons in Cupisnique iconography, my succeeding investigations have come to support the proposal.<sup>42</sup> Although the Head Bearer ashlar sculpture is highly eroded and will remain forever lost to conclusive interpretation, the likelihood of a head bearing figure in the Circular Plaza appears quite tenable within an understood visual program.

### 5.11 Final Conclusions

Through this extensive analysis of the Classic Cupisnique ceramic corpus, I have identified three interrelated concepts in Cupisnique iconography: 1) capture-decapitation 2) fertility and 3) symbolic dualities. Along with identified symbols of shamanic practice, these features have been variously addressed by preceding scholarship in Cupisnique studies. While Toshihara emphasizes the shamanism and symbolic dualities (2004), Elera and Salazar-Burger and Burger highlight fertility and capture-decapitation for Cupisnique (Elera 1993; Salazar and Burger 2000). Finally, Cordy-Collins has ventured capture-decapitation and shamanic practice within Cupisnique iconography without defining their relationship or correspondence (Cordy-Collins 1977, 1992, 1996, 1998, 2001).

Based on the current iconographic study, I would venture that the three concepts repeatedly encountered and reviewed through this survey of Classic Cupisnique iconography once comprised a developing complex visual system. These concepts include capture, decapitation/sacrifice and fertility/abundance. We may note that:

1) The concepts of *hunting (impending capture)* and *capture* clearly exist in: a) scenes of captive human individuals b) captive deer, b) predator species of felines, raptors, owls and spiders, and c) symbols of nets and ropes in the iconography. The captors and captives in this system may be perceived as (Table 5.5).

Concept of Capture	
Captors	Captives
Feline	Feline
Human	Human
Serpent	Deer
Avian	Serpent

Table 5.5

The backward glance of the feline arguably refers to the sequence of states, from *impending capture* to *captive victim*. The specific types of anthropomorphic figures identified in the Cupisnique iconography further underscore a possible ritual sequence to these concepts. For example, the figures with wrinkle faces and top-knot hairdos are both found 1) as seated individuals holding ritual objects and 2) as captive victims. The sculptural program at Chavín de Huántar appears to support the symbolic use of these identifying features – facial wrinkles and top-knot hairdos – to correspond with specific anthropomorphic figures and tenoned heads.

Similarly, the Cupisnique contortionist forms boast eye stripes that visually associate them with scenes of throat-cutting. Eye stripes appear further on an illustrated deer hunter and the Spider Decapitators. The throat-cutting scene thus perhaps conceptually completes the sequence from ritual seated performance to captive victim, and ending in throat-cutting or decapitation.



2) The *decapitation theme* is most directly evident through the representation of Decapitator figures – spider, avian and anthropomorphic. But it is most ubiquitous as a conceptual theme through the prolific illustration of *isolated heads*. This theme is ultimately one of human sacrifice.

3) The concept of fertility appears through numerous animal and insect species associated with vegetation, water abundance, and agrarian fertility. While this concept may include the feline-cactus scenes, it is also referenced through the images of orb-weaving spiders, sea life (shrimp and life), and abundant rodents eating food.

4) Inherent in this system is a structure of symbolic dualities – hunting/sacrifice associated with fertility/abundance. The structure of symbolic dualities is made explicit in the representation of dual marine shells, dual eye motifs, color and texture contrasts within the ceramic corpus. Symbolic dualities further proliferate in the monumental architecture and sculptures of key sites like Kuntur Wasi and Chavín de Huántar (Burger and Salazar-Burger 1993). Such dualities may be categorized as: (Table 5.6).

Symbolic Dualities	
<i>Spondylus</i>	<i>Strombus</i>
Red/Black	White
Female	Male
Left	Right
Blood?	Water?

Table 5.6

To the list compiled from the discussion above, I tentatively add *blood:water*, given the comparison between sacrifice and fertility in the major Cupisnique themes. The Cupisnique iconographic system thus boasts a rather cohesive set of principles that structure together coherently under a system of symbolic dualities.

These subjects, concepts, themes and dualities fit well with the traditions surrounding the northern Classic Cupisnique culture, such as Chavín de Huántar and the north-central coast. They also perpetuate into the successive north coast iconography of Moche culture. As I elaborate in the final Chapter 6, the Classic Cupisnique iconographic system proposed here thus presents considerable fit with ideological and social development along the north coast of Peru.

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<sup>1</sup> *Curanderismo* is folk healing practice common to Hispanic culture and Latin American countries. It derived originally from concepts of ‘holistic’ healing – of physical, social, financial, or psychological ailments – brought to the New World by the Spanish. Such folk practice combined aspects of the Greek humors, Arabic medicine, and European witchcraft, as well as Catholic symbolism. In many Latin American countries, *curanderismo* came to incorporate the diverse local customs and beliefs. On the north coast of Peru, this included the use of hallucinogenic plants such as San Pedro cactus (*Trichocereus pachanoi*). The use of San Pedro cactus in Peruvian *curanderismo* may thus support its application in pre-Hispanic practice; however, its modern use must be understood as considerably removed in meaning and form from ancient pre-Columbian practice.

The *curandero*, or folk healers, are further often termed *shamans* for their role in contacting or accessing supernatural realms in the healing or ritual process (Eliade 1965; Sharon 1972). When scholars have drawn on such *curanderismo* for comparison with pre-Hispanic ritual, practice or objects, they often incorporate the term *shaman* as a term interchangeable between modern and ancient fields (Cordy-Collins 1996, Elera 1993, Sharon 2001). This situation may lead to confusion as to the practice or meaning being identified in the pre-Columbian iconography and representations. Such confusion appears intentional in some cases, in order to blend aspects of various modern shamanic practices and beliefs, such as north coast *curanderismo* with documented Amazonian practice. Where possible, I utilize the terms – *curandero* or *shaman* – in reference to the specific north coast practice and general religious practice respectively. The challenge of such interpretive framework for the iconography and ancient ideology is addressed in Chapter 6, the conclusion.

<sup>2</sup> Campana supports this serpent species identification, both in Cupisnique and Chavín art (1995: 45).

<sup>3</sup> It is also found on composite figures based on feline forms (Larco 1941: Fig. 169).

<sup>4</sup> The examples from the Dallas Museum of Art example (Sharon 2000: Fig. 12) and Museum zu Allerheiligen Schaffhausen, Sammlung Ebnöther (Fig. 5.6) are the two notable exceptions, where the felines have no markings.

<sup>5</sup> While I only have one example of this scene, two other examples have appeared recently in the art market. Therefore, I feel confident in presenting this scene in support of an interpretation of capture.

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<sup>6</sup> The example cited by Cordy-Collins (1996: Fig. 2) illustrates a feline with backward glance overpowering its victim. Cordy-Collins describes this scene as a human victim, presumably based on the facial form held between the claws. Although the hind side may show deer legs and tail extending between the feline legs, it is possible that the representation combines human and animal features in symbolic reference.

<sup>7</sup> I have already referenced such netted head bottles in association with the feline-cactus theme (Fig. 5.5). Therefore, I acknowledge that the borders between these two ‘themes’ may be intentionally fluid, as will be discussed below.

<sup>8</sup> A similar set of symbolic attributes are appropriated in succeeding Moche spider iconography (Alva Meneses 2008; Bourget n.d.).

<sup>9</sup> Currently, the known examples of Cupisnique decapitator figures do not appear on ceramic objects (Salazar-Burger and Burger 2000, Cordy-Collins 1992a). Cordy-Collins illustrates a resin-painted double spout and bridge bottle (1992b: Fig. 2.5A-C); however, the heads are illustrated on the vessel body while the spider is modeled on the spout. There is no direct representation of decapitation or bearing of a severed head. Thus, it seems that the decapitator images were selectively illustrated on stone, bone or shell objects.

<sup>10</sup> The supernatural decapitator on a stone cup is published by Cordy-Collins in the reverse (compare Cordy-Collins 1992a: Fig. 3 and Bonavia 1994: Fig. 25). Therefore, the decapitators in this scene align with the other examples by carrying the severed head in the right hand.

<sup>11</sup> Given the rather unusual design of the ‘Fish decapitator’ bowl identified by Cordy-Collins (1992a: Fig. 5), I have not included it here until further comparative examples emerge.

<sup>12</sup> During ENSO events, the shells may spread down the coast with the warmer currents (Pillsbury 1996).

<sup>13</sup> The *pututus* recovered from the Gallery of the Snails at Chavín de Huántar may have been carved on the north coast prior to their transport to the monumental highland center (VanValkenburgh n.d.).

<sup>14</sup> Unfortunately, the pututu from this context was since lost. Therefore, there can be no comparative assessment of its design and iconography with the other examples cited in this section.

<sup>15</sup> Alva (1986: Fig. 208) represents a stirrup spout bottle of a modeled *Spondylus* shell whose surface is a polished red with traces of white pigment. Perhaps the color red was intentional.

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<sup>16</sup> The association between gender and handedness has been drawn from ethnographic examples, presenting a temporal disjunction with such ancient Chavín sculptures. Nevertheless, the Kuntur Wasi burials would appear to substantiate this gendered reading of duality in a contemporary archaeological context.

<sup>17</sup> Burger (1992) and VanValkenburgh (n.d.) identify a sculpture from the New Temple Plaza as another illustration at Chavín de Huántar of a *Strombus* shell trumpet (Burger 1992: Fig. 180). The quadrangular ashlar depicts an anthropomorphized monkey – identifiable by the long curled tail – that holds a serpent staff in the right hand and a cone-shaped object in the left. Although I cannot make a solid counter-argument to identify the cone object, the item is held in the left hand – impossible for playing a *pututu* – and is represented without the ridges and spire of the *Strombus* shell.

<sup>18</sup> There is an ingeniously interwoven design of a profile avian face just between the dual eyes (Elera 1998). The beak of the avian head corresponds to the volute head crests, but ultimately breaks their pattern.

<sup>19</sup> As noted in Chapter 3, Elera (1998) and Onuki (1997) note that the male individual of Tomb 2 has evidence of exostoses in the ears. For Elera, this signifies that the individual as a coastal diver – a role he identifies as prestigious in Cupisnique society (1998:282).

<sup>20</sup> Cordy-Collins (1976) represents a single spout black ware jar as comparison to the deer illustrated on certain Formative Period textiles. The scene on the jar depicts an anthropomorphic figure wearing a conical helmet; strapped across the head is a deer, with its dangling tongue, antlers and male genitalia clearly marked. Given the design of the bottle and these indicated features, the vessel appears to postdate the Formative Period examples attested in this corpus (Christopher B. Donnan, personal communication 2009).

<sup>21</sup> The conical helmet is a particularly interested feature that appears in Classic Cupisnique iconography, as it continues into Moche scenes of warriors and deer hunters as well. I am aware of at least two other instances of conical helmets in Classic Cupisnique stirrup spout bottles. One appears on a squatting individual cited below (Lavalle and Lang 1981: 68-69). Another occurs on a cross-legged individual modeled atop a vessel body designed as the incised isolated heads within a netted pattern. The figure holds an unidentifiable object to his mouth. Since this stirrup spout pertains to a private collection and I lack good photos, I have not reproduced it here.

<sup>22</sup> For example, the excavations at Huacaloma and Layzón recovered the largest percentage of Handstone C form, round stones likely used for grinding substances (Terada and Onuki 1985).

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<sup>23</sup> Succeeding Chongoyape and Salinar ceramics generally shift the stirrup to a front/back orientation with regards to the modeled figures. Larco (1941) cites this particular stirrup spout placement early on in his Cupisnique studies.

<sup>24</sup> Larco also publishes a shell pendant with inlays of turquoise (1941: Fig. 175). The image illustrates the upper half of an anthropomorphic figure, with quadrangular pendant eyes and a bifurcated head (similar to some contortionists and cut throats). The individual has large round earplugs and a dark band at the neck. Although highly eroded, the shoulders appear to be incised down to the end of the pendant. A close observation notes that the holes for hanging the object are at the opposite end as the head, or within the upper torso of the image. Could this pendant portray the same concept as the contortionists?

<sup>25</sup> This gender association and correspondence with the child bearers may be supported by similar presentation in the so-called Tembladera-style figurines. Some appear with long cloaks bearing spots (Donnan 1992: Fig. 44; Lavalle and Lang 1981: Fig. 66). When they appear in pairs, the gender division is clearly apparent between a figure with loin cloth versus a figure with long cloak, suggesting male and female respectively (Alva 1986: Fig. 463). Such figures with loin cloths are also individually represented (*ibid.*: Fig. 461, 466).

<sup>26</sup> Larco Hoyle suggests early on that the concentric circle motif “is nothing else but the stylization of feline spots” (1941: 150 translation mine). He then suggests that their abstract appearance on bowls and utensils “represents a religious sign derived from the feline cult.” (*ibid.*) Curiously, however, the Punkurí feline does not host such spots.

<sup>27</sup> On one example, the left hand is broken off, but likely held a similar position.

<sup>28</sup> The only complete image of a deer occurs on a Chongoyape style bottle, whose location remains unknown and thus unsecure as an example (Cordy-Collins 1976; Sharon 2000: Fig. 23). The deer lies on the round vessel base, while from its back emerges a columnar cactus. Cordy-Collins (*ibid.*) cites a Karwa textile representing the deer along with cacti as support for this interpretation. The Chongoyape bottle would thus pull together concepts of the feline-cactus theme: the hunt of deer, the cactus ecology and its possible ritual use.

<sup>29</sup> The excavations at coastal Puémape suggest llama domestication by the Early Puémape Phase, or Middle Formative (Elera 1998: 239). Likewise, the excavations at Huaca Negra revealed the ritual sacrifice of a llama in a Middle Guañape Phase burial, suggesting possible early domestication (Strong and Evans 1952).

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Yet Zoubek refutes this early date for llama domestication on the coast through excavations of Formative Period occupations at Huacas el Gallo/La Gallina in the Virú Valley (1998).

<sup>30</sup> In this discussion, I presume a representational difference between the incised designs of a curvilinear open ‘braided’ design and the more angular hexagonal ‘net’ design. In the rodent scenes, these polished patterns contrast with an incised cross-hatching design. The rope versus net formats may remain thus conceptually the same design, and related to capture.

<sup>31</sup> Lapiner identifies a bottle of a figure with a rounded back similar to the armadillo, as a coatimundi (1976). The seated upright pose and hands to the mouth relates to the rodents of Late Cupisnique and Chongoyape style. Perhaps there was a conceptual association between rodent and armadillo.

<sup>32</sup> This beak tooth is a significant feature of the Chavín avian sculptures. It appears to have more sporadic use among northern avian images, and thus may serve to distinguish between the two regional styles.

<sup>33</sup> The scholars even posit tentative species identification as the Hawk-headed parrot (*Deropterus accipitrinus*). The choice, however, seems driven to appease the opposing viewpoints by citing a *Psitticidae* sp. with considerable resemblance to raptor species and one that boasts head crests.

<sup>34</sup> The site of Limoncarro in the Jequetepeque Valley once boasted elaborate clay murals now largely destroyed. Recent excavations at the site are documenting the traces of decorated columns and platforms. Based on surviving fragments, the sites of Kuntur Wasi and Huacaloma clearly once bore extensive clay murals destroyed largely by unfavorable environmental conditions (Onuki 1995, Terada and Onuki 1985). Shelia and Thomas Pozorski argue that columns at Sechín Alto also were likely once decorated (2006).

<sup>35</sup> Of the raptor species, one complete specimen of a falcon was recovered from the Gallery of the Offerings (Lumbreras 1993: 307), tentatively identified as a *Falco femoralis*.

<sup>36</sup> Bischof (1985) offers an insightful analysis of a marine focus of this Casma Valley region. I would identify these fish murals as *borracho*.

<sup>37</sup> Larco presumed that the volute recalls the curled tail of the feline (1941).

<sup>38</sup> Toshihara refers to the design as the ‘pulse’ motif (2002); hence, I use it here for consistency.

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<sup>39</sup> At the site of Puémape, Elera notes a considerable increase in decapitated bodies and burials during the Salinar phase at the site (1998). I also acknowledge here the debate surrounding the deposited cranium and teeth in the Gallery of the Offerings, Chavín de Huántar (Reichlin 1947; Burger 1998)

<sup>40</sup> For a discussion of the visual parallels and their temporal relation see Bischof 1994 and 2000.

<sup>41</sup> It may be significant, for example, to note the identification by Junius Bird at Huaca Prieta of well-preserved fishing nets, some with coloration and bearing little signs of use in fishing. Bird notes the unclear function of these fine nets (1985). In similar tone, Grieder et al (1988) cite the use of nets as common burial wrappings during the Preceramic period at La Galgada. Finally, a Preceramic mural at Ventarrón clearly renders a deer in the center of a net design. The association of a net with the concept of capture is thus already explicit in this north coast center.

<sup>42</sup> Following my proposal in 2008, I noted that Mark Goetzke posits the same identification (1988).



## CHAPTER 6:

### CUPISNIQUE CULTURE AND IDEOLOGY

#### **Introduction**

Over the past seventy years, the scholarship of Pre-Columbian Peru has progressively identified Cupisnique culture as a distinctive early north Andean tradition. It is a cultural system predating the Chavín style horizon, which expresses precocity in the visual arts. Cupisnique visual objects – portable stone and ceramic vessels, gold masks, bone implements and objects of adornment – remain to date the most intrinsic features defining this north coast tradition. They illustrate a recognizable set of visual motifs in symbolic compositions that bring a sense of cohesion to this Andean style.

Such objects appear in mural programs at Collúd (Fig. 5.11) and Huaca de los Reyes on the coast, and extend into the stone sculptures at Kuntur Wasi (Fig. 1.23-1.24, 5.36) and Pacopampa (Fig. 1.28) in the highlands. These north coast and highland centers consist of columns, sunken plazas, and terraced architecture, which suggest shared conceptions of monumental architectural design, function and meaning. Yet the function of Cupisnique iconography and public architecture as developing, and reflecting, a materialized ideological system has remained under-explored in Andean studies. The intent of this thesis has been to approach Cupisnique culture in a comprehensive manner to permit such an exploration of its symbolic structure and function in northern Peru.

#### **6.1 Cupisnique as Cultural Group**

The Cupisnique tradition is increasingly considered one of three distinct regional groups that developed on the coast during the Middle Formative Period (Initial Period

[1200-900 BCE]). In addition to the northern Cupisnique, two other cultural groups have been postulated for the north-central coast and central coast, or the Sechín Valley and Manchay cultures respectively (ex. Burger 2006) (Map 1). Of these three coastal regions, Cupisnique ceramics and portable art provide the most significant corpus of visual material from which to venture interpretive analysis of Formative Period ideology.

Based on the distinctive Classic Cupisnique stirrup spout bottles and the associated iconographic programs, the Cupisnique tradition pertains spatially to the north coast and extends into upper river valleys and northern highlands, most especially through the Jequetepeque River system (Chapter 2). More specifically, the cultural sphere extends from the Moche through La Leche Valleys, and east into the north highland Cajamarca basin. The similar ceramic styles at regional monumental centers, and the extensive Cupisnique petroglyph designs along the routes of communication and trade, support this defined interaction sphere (Chapter 4). Temporally, the distinct Classic Cupisnique bottles situate the spread of this culture within the Middle Formative Period (1200-900 BCE). The Late Cupisnique style ceramics then suggest corresponding cultural and ideological changes into the Late Formative Period (900-250 BCE).

The extensive corpus of portable art and paucity of documented monumental contexts in the Peruvian north coast – i.e. the identified Cupisnique region – during the Formative Period contrasts markedly with the registered monumental centers in the north-central coast. The Sechín Valley region boasts limited portable art, consisting of ceramic figurines and stone mortars. The regional monumental sites such as Cerro Sechín (Fig. 1.17, 1.18), Moxeke, Punkurí (Fig. 1.1), Huaca Partida, and Cerro Blanco, however, exhibit stone sculptures and stucco murals of exceptional quality and identifiable scenes. These visual programs have stimulated considerable analysis and discussion, including comparison with Cupisnique culture.

In contrast to the Cupisnique and Sechín Valley iconographic programs, the Manchay culture of the central coast currently offers minimal visual materials. These

include painted and relief clay stucco murals at the sites of Cardal and Garagay (Fig. 1.21), and small strung figurines (Burger and Salazar-Burger 1998). The monumental and portable Manchay arts, nonetheless, suggest awareness of, and likely participation with, the ideological developments to the north, as well as with Chavín de Huántar.

These three coastal regions – Cupisnique, Sechín Valley and Manchay – arguably interacted with one another during the Formative Period. The degree of cultural influence may be assessed through the display of comparable iconographic motifs and concepts. Such motifs include the representation of spider forms, spider chelicerae, isolated heads, and net motifs – features fundamental to Classic Cupisnique iconography (Chapter 5). Nevertheless, each regional group boasts stylistic and iconographic differences that justify independent analyses. For example, we may compare the Spider Decapitator images and net designs on Cupisnique stone bowls with the identified spider-like form and fishing net illustrated on Garagay murals (Figs. 1.20-1.21, 5.12-5.15). Additionally, the feline-cactus theme has yet to be encountered in the Sechín or Manchay regions, suggesting its role as a Cupisnique visually symbolic formula. Such stylistic and iconographic regional distinctions are made evident as well through their selective importation into and application at Chavín de Huántar, which site thus remains critical to a comparative discussion of the respective coastal developments.

In this thesis, I focus predominately on the north coast Cupisnique tradition given the abundant corpus of visual art from which to advance interpretive analysis. I then compare this material with the sculptural program at Chavín de Huántar and with Moche ceramics to examine the ideological weight of a presumed Cupisnique visual system (Chapter 5). The numerous available comparisons argue for a strong relationship between the expressed visual programs of north coast Cupisnique, highland Chavín de Huántar, and successive coastal Moche. Nevertheless, Chavín de Huántar and Moche culture did not benefit solely from Cupisnique influence, thus maintaining an analytical distinction between the programs and the utility of their comparative status.

Significantly, scholarship on the Middle Formative Period (1200-900 BCE) has increasingly come to permit such independent analysis of Cupisnique as an innovative coastal tradition (Chapter 1). Investigations at site centers have provided crucial data regarding 1) public architecture: construction and layout; 2) ceramic sequences; and 3) subsistence patterns and changes (Chapter 2-3). This ever-increasing dataset of north coast Formative Period culture increasingly permits Formative Period scholarship to engage the corpus of looted Cupisnique ceramics and other media, and expand the analytical lens on social phenomena and cultural complexity. In such manner, the investigative focus may shift from more religious interpretations of the data to the role of Cupisnique iconography as materialized ideology (Chapter 2).

## **6.2 Shamanism in Cupisnique Art**

Regarding Cupisnique iconography, Larco was the first to suggest its illustration of an early religious system centered on the feline form as cult object. He presumed this tradition to relate intimately with a Nepeña tradition on the north-central coast and the rise of highland Chavín culture (1941). The notion of a feline cult was broadened by successive scholarship to ascribe an early religious foundation to the Chavín style horizon. This religious horizon was advanced through stylistic comparisons of forms bearing innately Chavín-style composition (Willey 1951). The balanced composition of staff-bearing individuals in sculptures at Chavín de Huántar thus compares with scenes on Late Cupisnique gold crowns from the north coast for their expression of a perceived religious order citing balance and harmony (Rowe 1962; Fig. 1.10, 1.14).

A prominent interpretive analysis of Cupisnique and Chavín iconography has come through the recognition of a repeated composition of feline and cactus images in Classic Cupisnique stirrup spout bottles and the Circular Plaza sculptural program at Chavín de Huántar. The cactus, identified as the hallucinogenic San Pedro (*Trichocereus*

*pachanoi*), is a prominent ritual element in modern north coast *curandero* practice. The identification of this plant in the Formative Period iconography provided a ‘catalyst’ for interpreting the religious nature of the Chavín stylistic horizon and prolific feline images. The tall columnar cactus illustrated in Formative Period iconography was undoubtedly appropriated in ancient practice and symbolism for its hallucinogenic properties. The presumed use of such hallucinogenic plants, alongside its iconographic display, thus has propelled interpretations of shamanic transformation – from human to feline – expressed through ritual ceremony and performance. The feline-cactus scenes have been identified as the visual display of shamanism, as a Formative Period ritual practice.

Abundant paraphernalia in the archaeological record – e.g. plain and decorated snuff trays, small mortars, and bone spoons – further suggest the use of psychotropic plants through the Formative Period at various monumental sites. These objects argue for a significant role of such ritual practices in Cupisnique and Chavín cultures. Their use, however, does not directly equate with the consumption of San Pedro as an ingested drink. Correspondingly, the use of entheogens does not exclusively define the role of shamanism in a cultural system, or the system itself of which it may form part.

According to Eliade (1964), ‘shamanism’ is an archaic social construct distinct from the vast permutations of magico-religious and mystical practices that may be found across world cultures. Beyond possible roles as healer or diviner, the ‘shaman’ claims to communicate between a perceived dichotomy of sacred and profane realms through an ecstatic state. In other words, ‘shamanism’ demarcates a specific socio-religious practice within certain culture groups. These groups, however, may boast distinct mythic, cosmological, ecological, and historic traditions. To identify ‘supernatural’ forms or the use of hallucinogenic plants in any ancient society as ‘shamanism’ thus must not preclude an investigation of the broader cultural system and must evince an apposite cosmology.

In Cupisnique and Chavín studies, it remains imperative to pursue the cultural impetus compelling and encompassing the represented scenes and symbols. The

Cupisnique visual corpus bespeaks an intricate symbolic system that goes beyond the illustration of cult objects and transformed supernatural individuals. In fact, I would argue that to interpret these ancient cultures as ‘shamanic’ cannot be done with the evidence at hand and impedes more contextual analyses. The term ‘shamanism,’ nevertheless, remains popular in Formative Period Andean studies based on a perceived anthropological ‘fit’ between visual references to ‘shamanic’ practices and the perceived level of social complexity at this time, which issues thus warrant further exploration.

### **6.3 Social Status and Stratification**

Based on design of monumental centers and decorated portable objects, the Middle Formative Period (1200-900 BCE) comprises somewhat independent but highly interactive ceremonial or political centers. These may be defined (if we seek to define them according to anthropological schema) as comprising complex chiefdoms given the evidence of massive architectural constructions, large-scale irrigation agriculture, and specialized labor groups (farmers and fishermen, sculptors and ceramicists) (see also Toshihara 2002). The expansion of such aspects implies the production of community leaders, as managers and arbiters of communal labor projects.

Cupisnique ceremonial sites host large-scale architecture – such as tiered platforms, sunken plazas and colonnaded entranceways, as well as monumental art and iconography – such as stucco murals, decorated relief columns and stone sculptures. Yet there is a relative lack of identified status markers or a clearly definable system of social hierarchy within the settlements or burials around the ceremonial centers during the Middle Formative Period (1200-900 BCE). This scenario prompts discussion as to the nature of authority supporting these monumental institutions (Burger 1992; Rick and Kembel 2004). Although the public monuments and funerary practices do not overtly express ruling elite, they evince developing social complexity through the increased

quality of certain burial offerings and the greater correspondence in certain monumental center constructions.

### 6.3.1 Personal Adornment versus Public Display

During the Middle Formative Period (1200-900 BCE), a limited set of items suggest patterns of social differentiation within contemporary burials at regional sites. For example, Grieder and his colleagues acknowledge the increasing use of ear plugs as markers of status contemporary with the advent of a centralized plan in Formative Period monumental architecture (1988: 90). Through his excavations at Puémapé, Elera cites the the tomb of a female, whose objects include a finely modeled Classic Cupisnique feline-cactus stirrup spout bottle and an anthracite mirror (1993, 1998). The distribution of such polished stone mirrors suggests their use as high-status items in Cupisnique funerary paraphernalia. Finally, the Cupisnique tombs registered by Larco in the Chicama Valley boast a relatively consistent set of one to two ceramic bottles and objects of adornment (bone rings, earplugs), along with occasional anthracite mirrors (1941). Burials such as Tomb 19 from Barbacoa stand out based on the presence of not only finely modeled ceramic bottles but also ornately carved bone implements (*ibid.*: 193-197). As Larco notes, what remains lacking in Classic Cupisnique burials, however, are the elaborate gold objects and ritual regalia of successive cultural periods.

As I discussed in Chapter 5, the Classic Cupisnique ceramic corpus supports the archaeological observations regarding limited markers of social rank. The represented anthropomorphic individuals do not display either elaborate ritual regalia or personal accoutrements. The male figures rather consistently wear simple loin cloths, ear plugs and head bands (also Larco 1941), while the female figures display long decorated cloaks. The removal of ear plugs in scenes of captive victims supports the view of these

items as status markers (Grieder et al 1988; Larco 1941). Such ear plugs thus offer the most identifiable components of a symbolic display of Classic Cupisnique social position.

This situation for the Middle Formative Period and Classic Cupisnique culture contrasts notably with developments during the Late Formative Period (900-250 BCE). During this time, high-status tombs filled with elaborate gold objects appear on the north coast at sites such as Chongoyape, Maltina, and Cerro Corbacho. Unfortunately, as with the ceramic corpus, the looted state of these funerary chambers provides minimal information for contextual analysis (Alva 1992, Burger 1996, Lothrop 1941). In the highlands, the centers of Kuntur Wasi and Pacopampa have revealed burials of high-status male and female individuals with gold and shell objects, and located within the monumental terraced architectural setting (Onuki 1997; Seki, personal communication 2009). As I discussed in Chapter 5, the elite tombs at Kuntur Wasi evince an intentional arrangement within the monumental platform and funerary chambers. The distribution of marine shells and specific visual motifs within these tombs suggests the appropriation of this developing ideological system by a budding network of high-status individuals.

Finally, elaborate gold objects have further been reported from Chavín de Huántar in the highlands and Ancón in the central coast (Burger 1992; Lothrop 1951), making clear the widespread distribution, use and display of increasingly elite material goods and ritual regalia. At Chavín de Huántar, the ritual regalia illustrated in the sculptural program and portable objects include anklets, bracelets, pectorals and pendant earrings, as well as feathered back adornments (Fig. 5.27-5.29, 5.53). These sculpted scenes of decoratively attired anthropomorphic figures cover the monumental building and plazas at Chavín de Huántar. They may find correspondence with actual objects – feathers, anklets and bracelets – worn by elite personages, such as those reportedly found in the burial of a high-status male individual at Ancón in the central coast (Burger 1992).

These monumental centers and associated funerary contexts imply social developments taking place throughout the Andean coast and highlands during the Late



Formative Period (900-250 BCE). This time period notably corresponds with that ascribed to the Chavín horizon and its presumed religious influence or prominence. The perceived social developments, however, may not necessarily mark the unification of a Chavín style horizon. Rather they may suggest one, or an interactive set of, complex ideological system(s) that developed through the Middle-Late Formative Period along the coast and into Chavín de Huántar that come to share a refined set of prominent motifs. The Cupisnique visual corpus and monumental architecture provide a compelling record of such ideological changes, and the refining of iconographic themes.

### 6.3.2 Monumental Canals and Interacting Cultural Spheres

From the Middle into Late Formative Period, the acquisition and visual design of high quality objects placed in burials makes apparent social networks and avenues of long-distant exchange extending through the northern coasts and into the highlands. Along with the high-status burials, the monumental centers at Kuntur Wasi and Pacopampa coincidentally witness extensive large-scale construction projects. These included the reconstruction and embellishment of a system of sunken plazas, as well as stone-lined subterranean canals.

Such water management features became increasingly more elaborate from the Middle to Late Formative Periods at these north highland monumental sites (Chapter 4), whose sphere of interaction seemingly extended along the Jequetepeque River system into the Cajamarca basin. The involvement of the Cajamarca basin in a Classic Cupisnique sphere may be witnessed – sparingly but notably – in polychrome mural fragments from Huacaloma and Late Huacaloma style ceramics. The latter boast Classic Cupisnique style stirrup spout bottle fragments alongside post-fire painted bowls with isolated human heads, step designs and net patterns around the outer face.

During the Late Huacaloma Phase (1000-550 BCE), the Cajamarca region does witness substantial large-scale construction projects, including the creation of the monumental stone-lined Cumbemayo Canal. That the Cumbemayo Canal pertains to the early Late Huacaloma Phase or Middle Formative Period in the Cajamarca basin is supported by the ceramics recovered at the *Toma* sector of the canal. The carved stone design and canal walls incorporate numerous zigzag patterns and step designs, in striking correspondence with the ubiquity of this motif in Late Huacaloma and Classic Cupisnique ceramics.

Regarding the latter, I have argued that the step element may relate to concepts of a tiered landscape or architecture, which elements further associate with the feline-cactus scenes and a highland ritual ecology. Such concepts align well with the landscape setting and ritual nature of the Cumbemayo Canal, set deep into a mountainous ravine that boasts perennial springs. The horizontal zigzag in the canal design likely provided an acoustic effect to the ritual experience of the highland water channel. More broadly, the canal may also be seen to progress in a vertical step pattern across the varied landscape elevations – from Sections I-II in the upper dry ravine and valley to Section III moving down through the San Vicente ravine toward the Formative Period site of Agua Tapada. A third ‘step’ perhaps conceptually took place at Agua Tapada, as the presumed canal arguably angled once again downward toward the Cajamarca valley basin.

Despite such argued influence of Cupisnique culture on the Cajamarca basin, the highland region does not appear to have fully incorporated the Cupisnique ideological system. This situation limited the impact on the Cajamarca basin of the impressive coastal and highland developments in social complexity. In other words, the expanding north Andean tradition came to support the establishment of high status individuals in the north highland centers of Pacopampa and Kuntur Wasi. This does not appear to have taken place in the Cajamarca basin to the same extent, which perhaps resulted from

certain regional social factors – e.g. the wholesale adoption of llama domestication in the highlands in contrast to the greater focus on coastal ecology by Cupisnique leaders.

As I argue in Chapter 4, the monumental Cumbemayo Canal in the Cajamarca region may have served to bind socially the growing number of Cajamarca site communities during this time, especially those greater utilizing the high altitude zones for camelid domestication. The communities may have worked together to plan and maintain the monumental water architecture feature set in such an upland ritualized landscape. In this Cajamarca region, the impressive canal was created and maintained outside of a centralized monumental edifice, in a high-altitude zone, and in a location overlooking access to the Cajamarca basin from the west. The latter supports the influence from this region of the Jequetepeque River system into the Cajamarca basin at this time. But also it bespeaks a relatively limited connection of the Cajamarca region to cultural spheres of influence shifting along the Jequetepeque River system.

In contrast to the growth of Pacopampa and Kuntur Wasi into the Late Formative Period, for example, certain coastal sites appear to reduce considerably in monumental use or have been abandoned as ceremonial centers by the Late Formative Period, or the end of the Classic Cupisnique phase. Such presumed reduction in site populations has been argued to have taken place at coastal centers such as Puémapa around 800-700 BCE (Bird 1987; Burger 1988, 1993; Onuki 1993). A lack of archaeological research evincing the continued presence of coastal monumental structures during the Late Formative Period has forced consideration as to the nature of these marked social changes. Investigators have postulated the role of dramatic climatic episodes such as Mega ENSO events on the Peruvian coast (Chapter 3).

Through my research on Classic Cupisnique ceramics and comparison with later styles, I would argue that the former established a complex ideological system that conceptually fit with an expansion of Cupisnique populations into upper valley and highland settings. By the Late Cupisnique Period, however, this visual program greater

diversified, becoming on the coast increasingly focused on a local ritual ecology. Such symbolic components then extend into succeeding north coast populations, to be taken up in force by Moche cultural leaders. This gradual iconographic shift, which highlights increasing regional differentiation, led eventually to the emergence of localized styles such as coastal Salinar and highland Cajamarca. The Classic Cupisnique iconography thus appears to serve a significant role in the ideological foundations of this region and the establishment and continued development of social complexity across this landscape.

#### **6.4 Cupisnique Visual System**

In this thesis, I establish the framework for addressing Classic Cupisnique ceramics as a visual corpus in order to examine the symbolic nature of this technically and visually impressive iconography. The highly modeled naturalistic forms and ubiquitous incised motifs provide this ceramic program a sense of stylistic consistency. That is, the forms and their composition are rendered in similar fashion to suggest a shared symbolic content underlying the style. Many of these composed forms have been recognized and discussed in preceding scholarship, such as the supernatural decapitators, feline-cactus scenes, and dual marine shells. These visual themes have been identified as expressing concepts such as 1) hunting, capture and decapitation/sacrifice, 2) ritual ecology, and 3) symbolic dualities respectively (Cordy-Collins 1992, 2001; Elera 1993, 1998; Salazar-Burger and Burger 1983, 2000). Yet the programs have generally been approached singularly rather than as comprising a complex and reticular visual system.

My ultimate contribution in this thesis then is not the general identification of the prominent themes, or their role in reflecting symbolic concepts during the Formative Period. Indeed, the perception of meaningful iconographic motifs and scenes in Cupisnique and Chavín iconography has served as a continual foundation for defining a Cupisnique culture and the Chavín style horizon, especially in the absence of an

identifiable state system or political entity during the Formative Period. But the nature of this *ideological* system has remained underexplored, largely due to a perceived disjunction between such visual themes and their corresponding placement in Andean prehistory – for example, between scenes of ‘capture and sacrifice’ versus ‘shamanic transformation.’ The analysis of Classic Cupisnique iconography here provides a framework by which to do away with the perceived disjunction, by evincing how *together* the Cupisnique visual themes comprise a complex *ideological system*. The recognition of this ideological framework may be seen to provide the necessary conceptual fit with the ideological development of coastal through highland monumental centers and increased social stratification.

#### 6.4.1 Hunting and Capture

Hunting and capture are clearly prominent concepts in the iconography and related to the decapitation theme. The Classic Cupisnique corpus represents not only the natural capture of deer by feline and human hunters (Fig. 5.7, 5.42). It also illustrates scenes of captive felines by serpents and humans by felines (Fig. 5.4-5.6), among other combinations. Indeed, a number of anthropomorphic captives are independently modeled in the iconography (Fig. 5.44-5.46), demonstrating the significance of this social role or ideological concept for Cupisnique society. The captive individuals appear with their hands tied behind the back. In some instances, their captive state is further indicated by the removal of earplugs or mutilation to the face (Fig. 5.46). These figures in the iconography yet closely relate – through the selective representation of facial wrinkles and top-knot hairdos – to scenes of seated figures with round objects in the hands (Fig. 5.49-5.50, 5.52). It is tempting to interpret these held items as handstones for the grinding of red pigment, which is ubiquitous in Cupisnique burials, and knives, which suggest the eventual act of throat cutting or decapitation (Fig. 5.57, 5.61).

The most extensive studies on a strictly Cupisnique visual system have focused on a set of impressive stone bowls and vases carved with scenes of complex supernatural decapitators (Salazar-Burger and Burger 1983; Cordy-Collins 1992). The isolated heads scattered over the primary individual and often held in the right hand, evince the role of these figures as decapitators. The decapitators often take the guise of mixed spider attributes, known in such cases as Spider Decapitators (Fig. 5.12-5.15). The scenes thus suggest the creation of complex natural and cultural metaphors between spider webs and fishing nets, as emblems of capture. Equally, the spiders – which likely represent the orb-weaving *Argiope* sp. – recall the rainy season and time of fertility on the coast, when such species multiply and openly display their webs across expanding vegetation (Fig. 5.18).

These Spider Decapitator scenes, such as those rendered on the Dumbarton Oaks Plate and Limoncarro Vase (Fig. 5.12, 5.15), bring into focus the inescapable profusion of incised isolated heads in Cupisnique iconography. As I discuss in Chapter 5, such isolated heads serve as a nearly ubiquitous visual motif that symbolically ties together the iconographic system. The isolated heads appear most notably in combination with gourd forms and yuca plants, as well as associated with backward glancing felines and the dual marine shells. The profusion of isolated heads serves to index repeatedly the concepts of decapitation and sacrifice, reinforcing their role as fundamental components of a Classic Cupisnique ideological system. The net and rope designs often associated with these scenes of isolated heads underscore this ideological program, as *indexes* of capture.

The net designs, which are common to scenes of isolated heads and carried by porters in the iconography (Fig. 5.11, 5.26, 5.66), may refer to the concept of capture through their social use as fishing nets, net bags for collecting food (Fig. 5.54), and as captive devices in deer hunting. The rounding up of deer through strategically placed nets appears as a longstanding tradition on the north coast. For example, a deer form is illustrated within a polychrome net design in an Initial Formative Period (2200-1800 BCE) mural at the site of Ventarrón (near Collúd) in the Lambayeque Valley. The

succeeding Moche ceramics further illustrate scenes of deer hunting associated with nets in the landscape (Donnan and McClelland 1999: Fig. 4.28, 4.89).

In Moche iconography, such deer hunting representations present conceptual parallels with ideas of ritual warfare and sacrifice in the visual system (Donnan 1997). The capture of deer and the use of nets in the Cupisnique iconography may offer similar metaphorical relationships between a defined social practice and its conceptual ritual parallel. Indeed, the mutual capture by felines of humans and deer in Classic Cupisnique iconography would support the early establishment of this symbolic parallel in north coast ideology (Fig. 5.6-5.7), between the natural and social order. In fact, what distinguishes north coast Cupisnique iconography foremost from other identifiable coeval visual programs (coast and highlands) is the complex development of such *ritual ecology*.

#### 6.4.2 Ritual Ecology

A ritual ecology presumes the selection of a particular set of natural species – local or intrusive – to function as conceptual parallels to the social world or ideological system. In his investigation of the feline-cactus theme, Elera proposes such a concept by interpreting these scenes as symbolic of highland watering holes, or locations where such species naturally congregate and reflect auspicious centers of fertility and production (1993, 1998). The representation of step-and-volute elements in these scenes supports their identification as a mountain setting, as it does for later Moche iconography (Chapter 5). The feline and serpent, however, also index concepts of hunting and capture through these scenes (Fig. 5.1, 5.3-5.4). This intentional species set thus references interwoven concepts of capture/sacrifice and fertility, crucial aspects of Classic Cupisnique ideology.

Other species illustrated regularly throughout Classic Cupisnique iconography suggest their equally selective importance for the ideological system. The most prolific representations in addition to the feline, cactus and serpent include those of monkey,

parrot, raptor, owl, rodent, and catfish. Of these forms, the raptors appear as the least naturalistic animal representations, comprising varying stylized features with emphasis on the fierce beak. In contrast, the highly naturalistic, modeled rodents are regularly illustrated eating, marking their greater presence in a productive coastal environment as consumers. These natural species are hunted avidly by owls along the coast (see also Bourget n.d.), perhaps evincing the mutual placement of these species within the visual system and comprising a symbolic duality – *fertility:sacrifice*. Such symbolic dualities appear to provide an ever refined structure to the ritual ecology and visual program.

#### 6.4.3 Symbolic Dualities

Undoubtedly, the most identifiable coastal species adopted and displayed in Classic Cupisnique iconography are the warm-water marine shell species, *Strombus* and *Spondylus* (Fig. 5.23-5.25). These two species first appear together – as a visual pair – during the Middle Formative Period and largely through north coast Classic Cupisnique ceramics. As many scholars have already posited (Burger 1992, Cordy-Collins 1980, Toshihara 2004), the dual shells index symbolic dualities integrated into Cupisnique visual program. I have demonstrated how these natural shell species come to embody the symbolic dualities of *female:male*, *left:right*, and possibly *blood:water* through the natural presentation of the shells as *red:white*, *rough:smooth*, and right-handed trumpets (Chapter 5). Such symbolic dualities are supported by the intentional deposition of the shells in particular tombs within the site of Kuntur Wasi, as well as in their prominent visual display and performative use at Chavín de Huántar (Fig. 5.27-5.29).

The paired marine shells, however do not present the only symbolic duality in the iconography. The Classic Cupisnique tradition boasts numerous examples of stylized faces bearing two distinct eye forms: one quadrangular with a pendant iris, the other rounded with an encircling serpent form (Fig. 5.31-5.34). These dual-eye scenes have



been posited as indicating shamanic transformation, from human to feline. Such a model of shamanic transformation, however, is not fully supported by the visual examples and their various manner of representation (Chapter 5). The dual eyes on supernatural figures rather appear to present another mode for expressing symbolic duality, one intimately embedded in the complex iconographic system and perhaps extending from north-central coast precedents in the Punkurí-style stone mortars.

The concepts of hunting, capture, sacrifice, and fertility evident in Classic Cupisnique iconography and embedded in a developing metaphoric ritual ecology, are ultimately and intimately structured under this system of symbolic dualities. Since the dual-eye motif often occurs on composite figures – faces blending feline fangs and avian headcrests – the eye forms may serve to encode the most basic underlying conceptual duality in Cupisnique ideology – *fertility:sacrifice* – into these complex figures, such as Monolith 1 at Kuntur Wasi (Fig. 1.23). Similar to the establishment of a north coast ritual ecology, the role of symbolic dualities expands considerably from these Formative Period foundations in Classic Cupisnique ideology into successive visual traditions. Therefore, I conclude this chapter by positing some observations regarding the Classic Cupisnique ideological system and its conceptual fit with preceding and succeeding visual ideologies.

## 6.5 Developing Ideology

As I have mapped out through this text, the continuities between this proposed Cupisnique ideological system and those of the preceding and successive traditions in the northern Andean regions clearly support its conceptual fit as an early ideological system established on the north coast. Although I focus my analysis on Cupisnique ceramics, I venture visual comparisons across other media (stone vessels, stone relief sculptures, shell and bone objects), as well as across cultural groups (Cupisnique and Moche ceramics). The incorporation of these comparative sources compensates for the current

minimal well-preserved monumental art in north coast Cupisnique centers (ex. Caballo Muerto and Collúd [Map 1; Fig. 5.11]) that would enrich discussion of Cupisnique iconography as an ideological system. The visual analysis thus crosses between monumental and portable art, which nonetheless both function as materialized ideology.

Throughout Chapter 5, I elaborate substantial visual and ideological comparisons between Classic Cupisnique ceramics and monumental iconography that appears up into the north highlands such as at Kuntur Wasi and Pacopampa. The comparisons evince not only the strong interaction and relationship between these regions and monumental centers, especially along the river valley systems. They further substantiate the role of the Classic Cupisnique system as a cohesive ideological program, one which may be adopted and adapted by a monumental center polity by maintaining intact the underlying concepts – *capture, sacrifice and fertility* – and founding structure – *symbolic dualities*.

The development of Classic Cupisnique iconography with its advanced ceramic visual program, however, did not develop overnight along the north coast. The influx of stirrup spout bottle forms, cylinder seals, and marine shells from the northern regions of Ecuador attest to active trade with this region by at least the Middle Formative Period (1200-900 BCE). The advancement of Cupisnique social complexity along the Peruvian north coast undoubtedly benefitted from early cultural exchange, as well as continued trade with, the tropical regions of Ecuador to the north through the Formative Period. The north coast Cupisnique populations also likely profited from the advancing regional centers to the south, in the north-central coast Sechín Valley region.

#### 6.5.1 North-Central Coast: Casma Valley

The regions of well-documented Initial and Early Formative Period (2500-1200 BCE) cultural advancements include the Norte Chico complex centered around the Supe Valley occupations of Caral and Aspero, as well as the Sechín polity centered around the

numerous Sechín and Casma Valley settlements. As I have discussed through this thesis, the latter sites – in particular, Cerro Sechín – have posed some of the greatest conceptual challenges for scholars of Formative Period studies, given 1) their visual display of human sacrifice and 2) the presumed ‘collapse’ of these large-scale polities by the Late Formative Period and advancing Chavín horizon.

The monumental centers of the north-central coast during the Initial-Middle Formative Period include the elaborately decorated Initial-Early Formative Period monuments at Moxeke and Cerro Sechín, as well as the massive Initial-Middle Formative Period architectural centers of Las Aldas and Sechín Alto. The site of Sechín Alto largely postdates the former centers, boasting an extensive frontal plaza with two sunken circular sub-plazas and a decorated colonnade on the highest terrace dating from the Early-Middle Formative Period in ceremonial use (1500-1000 CE) (Pozorski and Pozorski 2006). The occupations at this site evince decorative ceramic traditions and clay figurines (*ibid.*); however, the preserved examples of expressive portable and monumental art are confined to the former Initial-Early Formative centers of Moxeke and Cerro Sechín.

At the monumental site of Cerro Sechín, large polished stone ashlar figures decorate the outer façade. They illustrate anthropomorphic figures, some with pillbox hats, clubs in one hand, and stylized loin cloths (Fig. 1.17). The individuals process in profile from the around the back side of the monument toward the central stairway entrance on the frontal façade, in bilaterally symmetrical opposition. Between these ritually adorned figures are illustrations of isolated human heads (Fig. 1.18), bleeding individuals, and human body parts such as vertebrae, eyes, and entrails. The overall scene is thus sacrificial in nature, with the greatest profusion of severed heads.

As Bischof has extensively noted (1994, 2000, 2006), the visual style of Cerro Sechín sculpture has visual parallels and clear adoption into the north-central highlands and Chavín sculptural tradition. Sculptures of severed heads have been recovered from Chupacoto in the Callejón de Huaylas by Donald Thompson (1962). Sculpted scenes of

similar profile individuals bearing severed heads occur at Yurayaku near Chavín de Huántar as well as in the sculptural program at this highland center (Fig. 1.15, 5.127). The seemingly macabre scene at Cerro Sechín has thus perplexed scholars regarding its fundamental relationship to the development of Chavín style and iconography.

These north-central coast centers largely predate the Classic Cupisnique rise on the north coast (Fuchs 1997). Yet the Cupisnique tradition adopts certain recognizable features from this north-central coast, notably in the design of the supernatural decapitators (Salazar-Burger and Burger 1983). The Spider Decapitator images host pillbox hats and club elements of striking similarity to the Casma Valley designs (Fig. 1.17, 5.12-5.15). They also bear a severed human head in one hand, and may host several others over the body. The blatant use of this Casma Valley style in rendering decapitator figures thus argues for a certain recognized cultural continuity or reflective affiliation on the part of the Classic Cupisnique populations to the quite successful north-central coast centers. In contrast to the earlier tradition at Cerro Sechín, the north coast Cupisnique infuse the concept of sacrifice with a ritual ecology of orb-weaving spiders or raptorial birds. These composite Cupisnique beings thus contrast visually and conceptually with the preceding system expressed on the north-central coast monumental facades.

This is not to imply, however, that the Casma Valley centers ceased to have an active role or participation in the ideological developments along the coast through the Middle Formative Period and contemporary with Classic Cupisnique cultural developments. Studies at Cerro Sechín evince longstanding post-monumental occupations of the site through the Late Formative Period (900-250 BCE) (Fuchs 1997). A human burial in the center, which dates around 1100 BCE, contained a Late Cupisnique style stirrup spout bottle – a rather unique feature in this region. The sites of Cerro Sechín and Sechín Bajo further incorporate stone sculptures and post-occupational graffiti illustrating spider chelicerae (Fuchs 2006: Fig. 13; Tello 1956: Fig. 103). Along with incorporation of a spider-like form and net design at the central coast site of

Garagay (Fig. 1.21), these features argue for visual and cultural exchange across the coast during the Middle Formative Period. The recent and continued excavation of north-central coast sites dating to the Middle and Late Formative Period, such as Huaca Partida and Cerro Blanco in the Nepeña Valley (Ikehara and Shibata 2005), will undoubtedly offer greater insight into the complex social exchanges and iconographic programs that continued to develop in this region. This includes the relationship and exchange with the highland site of Chavín de Huántar.

### 6.5.2 Chavín de Huántar

The monumental center of Chavín de Huántar in the Callejón de Conchucas, undoubtedly has generated the most noteworthy comparisons with Classic Cupisnique iconography and ideology. I have demonstrated throughout the text the close visual correspondences between Classic Cupisnique ceramics and the sculptural program at this impressive highland site. These include the presence of anthropomorphic individuals, which host top-knot hairdos and bear severed heads or ritual objects such as knives, cactus stalks, *Strombus* and *Spondylus* shells (Fig. 1.11, 5.27-5.28, 5.53).

Notably, these images largely comprise the visual program of the Circular Plaza, which ceremonial precinct is flanked by the Gallery of the Offerings and Gallery of the Shells. The former gallery boasts abundant coastal Cupisnique materials, such as Raku and Wacheksa style stirrup spout bottles and carved stone vases with Cupisnique-style heads (Lumbreras 2007). It also notably included Mosna style red-on-orange wares, which suggest the inclusion of the Cajamarca region into this sphere of interaction. In close comparison, the Gallery of the Shells was deposited with over twenty imported north coast *Strombus* shells. The marine mollusks have been modified to serve as trumpets, a performative use that is illustrated repeatedly in the iconography at Chavín de

Huántar and likely parallels the use of such shells recovered from the north coast and highlands (Fig. 5.5.27-5.29, 1.25).

The tenoned head program at Chavín de Huántar further exhibits human heads with top-knot hairdos and wrinkled faces, reminiscent of the Classic Cupisnique bottles of anthropomorphic modeled figures (Fig. 5.39, 5.52). These heads contrast with other carved stone heads boasting composite designs of feline fangs, raptorial feathers or beaks (Fig. 5.41). Strikingly similar composite figures may be found in abundance in Classic to Late Cupisnique iconography. Finally, the Tello Obelisk presents, in one elaborate sculpted stele, the set of floral species so prolific in the Cupisnique visual corpus – yuca and bottle gourds (Fig. 1.8, 5.120-5.121). Lathrap has argued for the clear importation of these symbolic species from the tropical forest to the east (1971); however, by that time, the plants had been grown in the coastal valleys through irrigation agriculture.

The Classic Cupisnique, Sechín styles and Manchay culture rather substantiate clear coastal precedents for Chavín visual style, iconography, and ideological foundation. These coastal regions no doubt interacted and thus served as equally relevant sources for Chavín de Huántar. Nevertheless, the ritual ecology illustrated in the north coast Cupisnique tradition connects the culture further to the tropical and subtropical regions of extreme northern Peru and Ecuador. This northern tropical influence and regional connection will continue as a significant ideological factor in successive north coast cultures of Peru, extending from Cupisnique into Moche ideology (Bourget n.d.). As I have established throughout the text, this appears to be just one of many cultural parallels drawn by the Moche from Cupisnique precedents.

### 6.5.3 Moche Iconography and Ideology

Throughout this thesis, I have ventured iconographic comparisons between the Classic and Late Cupisnique ceramics and successive Moche visual culture on the north

coast of Peru. The comparisons are justified given the close temporal proximity between these two cultural traditions, as well as the blatant adoption by the Moche of preceding Cupisnique visual themes and iconographic motifs. In fact, through my investigations for this project, I would posit that the major framework of ideological concepts, ritual ecology and symbolic dualities evident in Moche iconographic has its significant roots in Classic Cupisnique ideology.

Moche monumental centers and ceramic bottles appropriate and repeat the predominant Classic Cupisnique themes, including feline-cactus scenes and Spider Decapitators. At Huaca de la Luna in the Huacas de Moche, the capital of the Moche state system, such Spider Decapitators line the northern frontal façade. These murals exhibit the composition and features of Cupisnique examples, including the pillbox hat – a clear allusion to the now-ancient ideological program (Fig. 5.19). As the adoption of these preceding Cupisnique themes suggest, Moche iconography likewise emphasizes the visual display of capture and sacrifice, advancing on such conceptual metaphors as deer hunting and the capture of human victims (Donnan 1997). The use of visual contrasts (two colors, interlaced pattern, etc.) to express a structure of symbolic dualities underlying the ideological system is also amplified in Moche iconography, including particular emphasis on a *red:white* duality (life: death; Bourget 2006).

Finally, Moche iconography abounds in the creative structuring of local and intrusive species into the ideological system as a ritual ecology (Bourget n.d, 2006). The list of species comprising the Moche iconographic system is augmented in comparison with preceding Classic Cupisnique corpus. Nevertheless, the Moche maintain the prominent ritual ecology established earlier on the north coast, and they continue the tradition of rendering such species in highly naturalistic form on modeled ceramic stirrup spout bottles. This set includes the monkey, owl, catfish, and rodent species, and to a lesser extent the feline, serpent and parrot. They reflect the predominant forms of Late Cupisnique and Chongoyape iconography.

As mentioned, the ritual ecology visible in the Classic Cupisnique corpus shifts slightly in emphasis on certain species into the Late Cupisnique style. The predominantly Classic Cupisnique feline-cactus scenes and dual marine shells are reduced to largely indexical or symbolic programs of contrasting ceramic textures, step volute designs and abstract concentric circle motifs. In contrast, the Late Formative Period (900-250 BCE) coastal ceramics abound in scenes of modeled owls and rodents eating. The dynamic of these two species – owl and rodent – on the north coast perpetuates the long-established ideological concepts – *fertility:sacrifice*. The rodent eating suggests the presence of these pests in times of abundant crops and vegetation. The rodents are recognizable symbols of natural fertility as their populations readily multiply in times of healthy food supply (Bourget 2006). The owls offer the symbolic hunter and adversary of the rodent, as chief predator of these fertile pests. These two species are increasingly represented in Late Cupisnique and Chongoyape ceramics (Fig. 5.101, 5.87-5.89, 5.109). They suggest greater attention to a north coast ritual ecology and conceptual distinction from a presumed Chavín horizon.

The owl remains prominent in succeeding Gallinazo and Moche visual cultures. In fact, the owl becomes a striking symbol of hunting and sacrifice in Moche ritual programs (Bourget n.d.). Cupisnique iconography thus offers the most substantive avenue for advancing understanding of the foundations of north coast ideology, the region which has an incredibly significant impact on social complexity in the Ancient Andes.

## **6.6 Final Considerations**

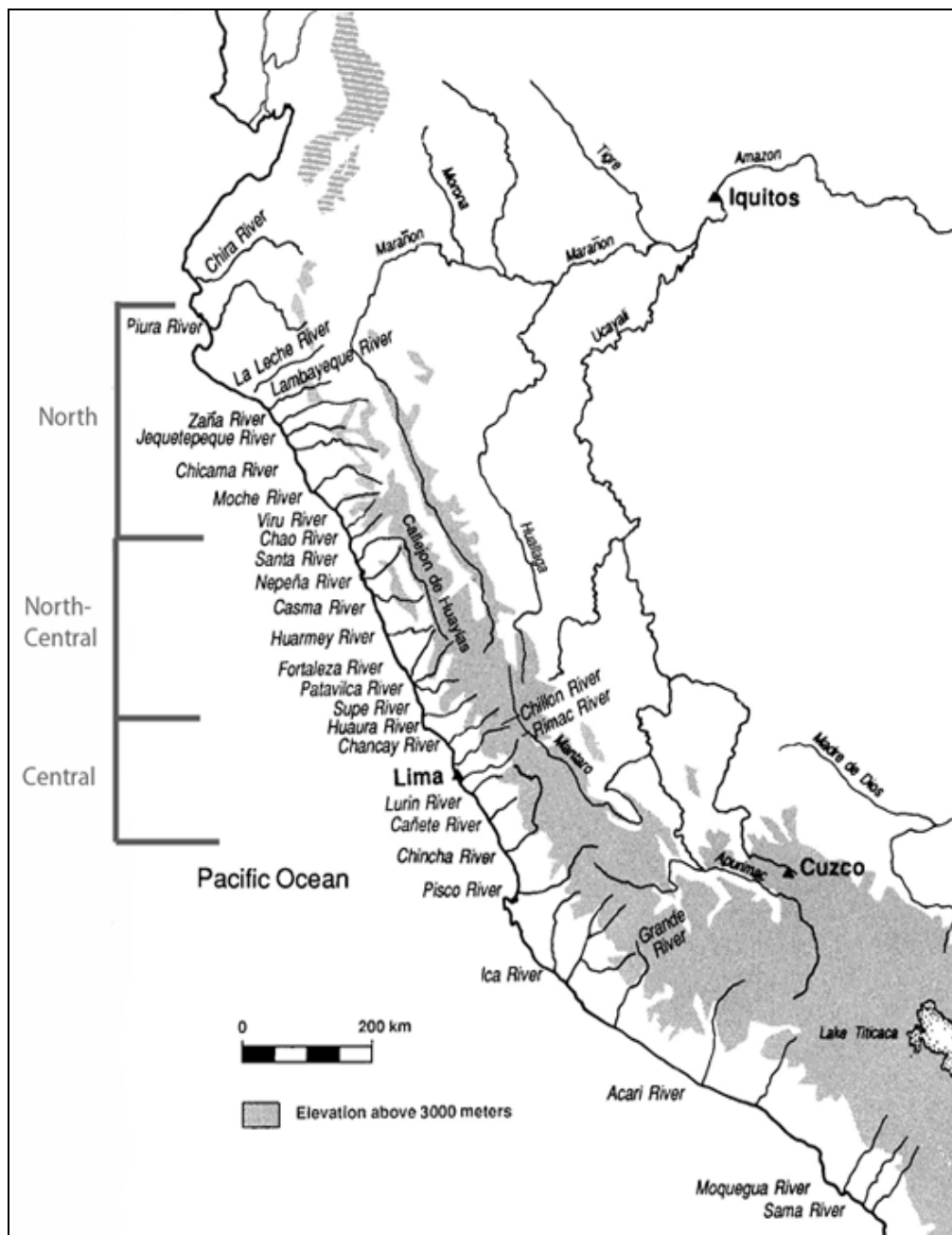
The Classic Cupisnique culture on the north coast of Peru clearly developed an impressive visual culture, whose ultimate intent was the expression of a complex ideological system. Unique to the north coast at this time, the Cupisnique visual program developed through the establishment of a ritual ecology structured within a program of



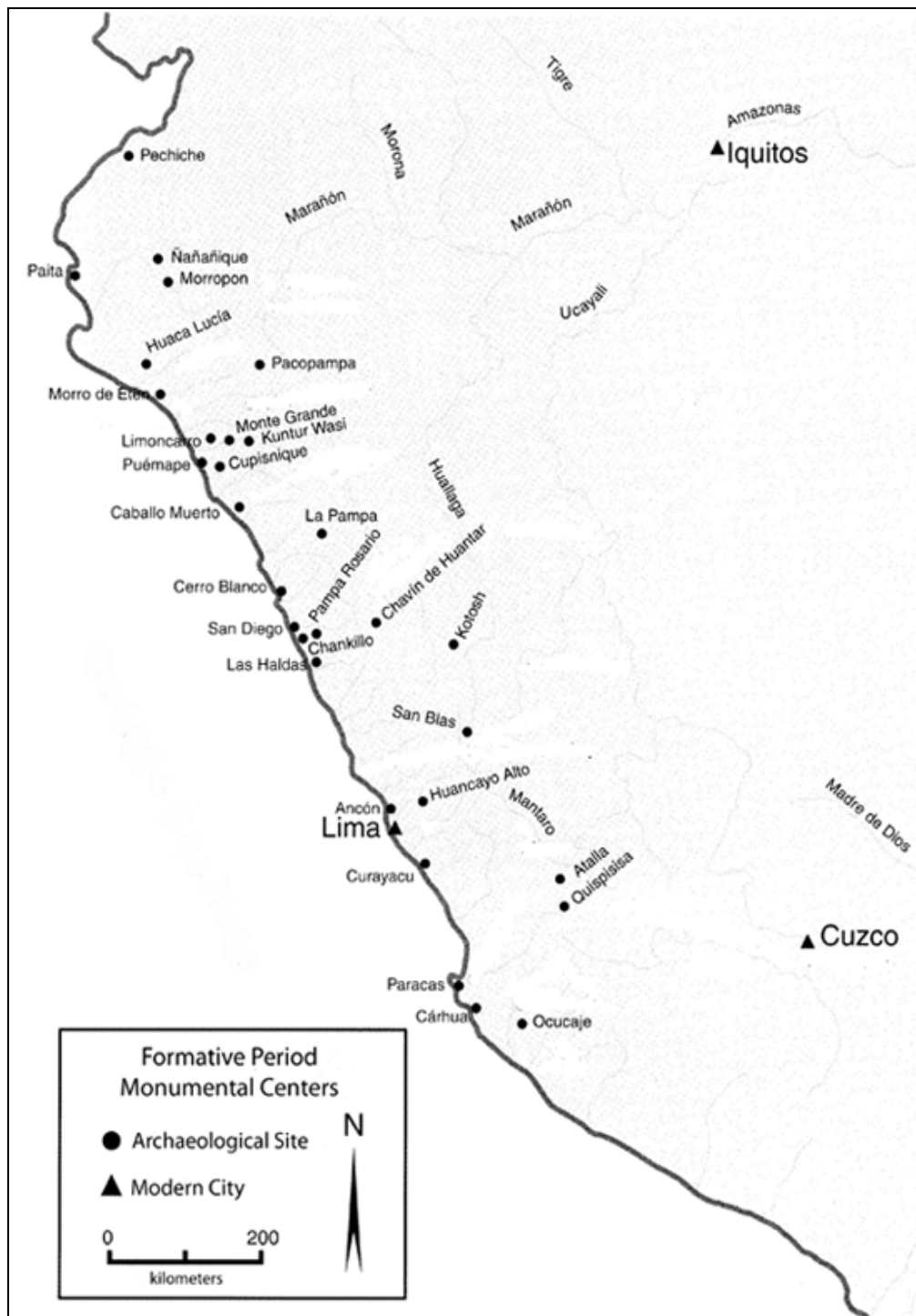
symbolic and conceptual dualities. Such complex iconographic system became widely disseminated within the Cupisnique regional sphere, suggesting its easily understandable yet highly potent ideological weight. The monumental centers that adopted and publicly displayed this visual system suggest its further utility to substantiate and promulgate a growing population of high status individuals and perhaps developing ruling elite.

Throughout this thesis, I have drawn on the advanced state of Chavín and Moche visual studies to offer a model approach for continued investigations of Cupisnique visual culture. In the end, the semiotic approach from Chavín studies and thematic approach from Moche research structured a system of investigation that has afforded significant new insights into Cupisnique iconography and ideology. The observations and interpretations posited through this extensive analysis offer exciting new avenues for continued investigations of this impressive Formative Period north coast culture.

## MAPS



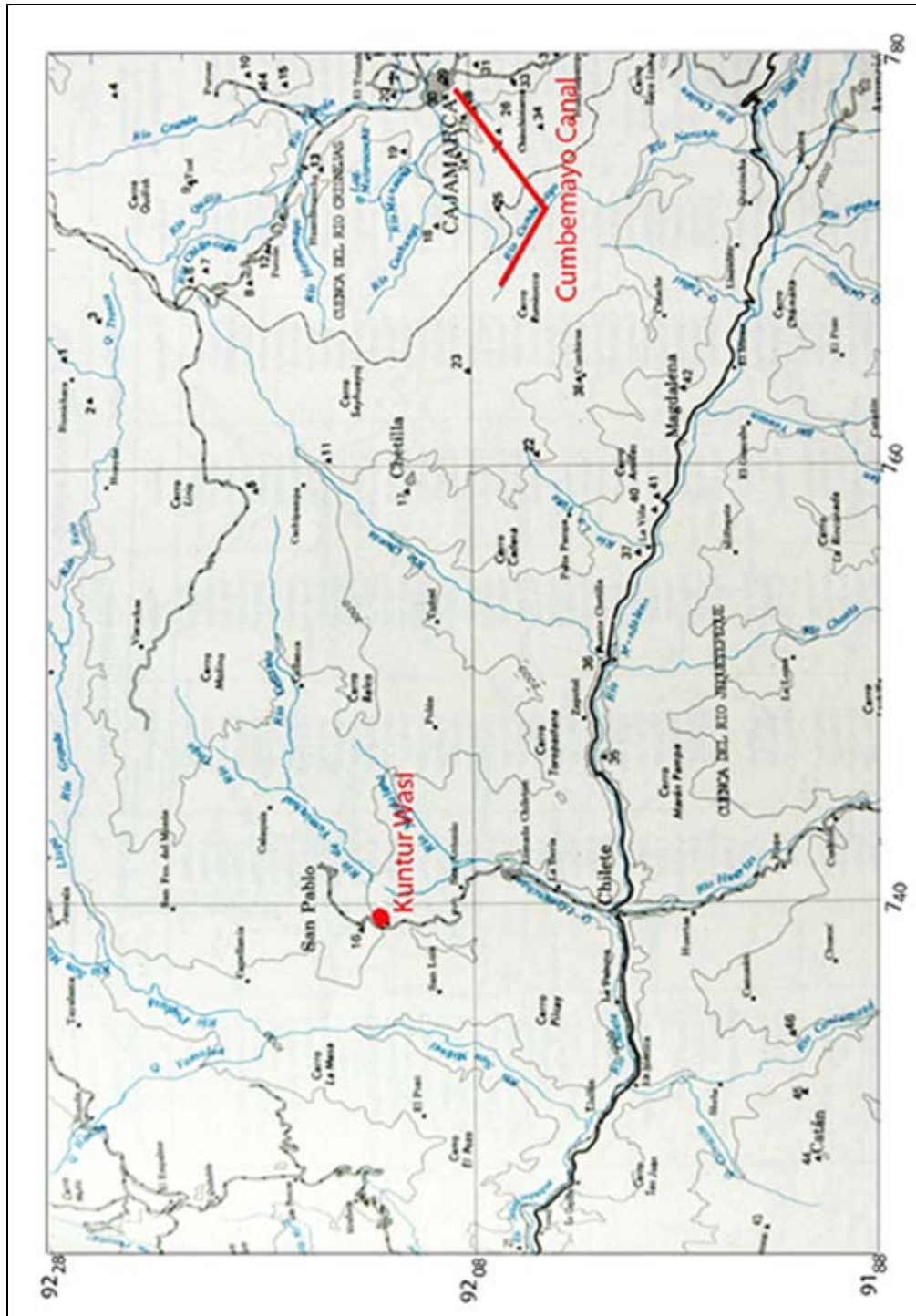
Map 1. Geographic Divisions of Peru



Map 2. Formative Period Monumental Centers



Map 3. Cajamarca Region: Formative Period centers



Map 4. Jequetepeque River System: Cumbemayo Canal and Kuntur Wasi

## FIGURES

## CHAPTER 1



Figure 1.1 Feline head and paws, clay sculpture, Punkurí (Nepeña Valley)

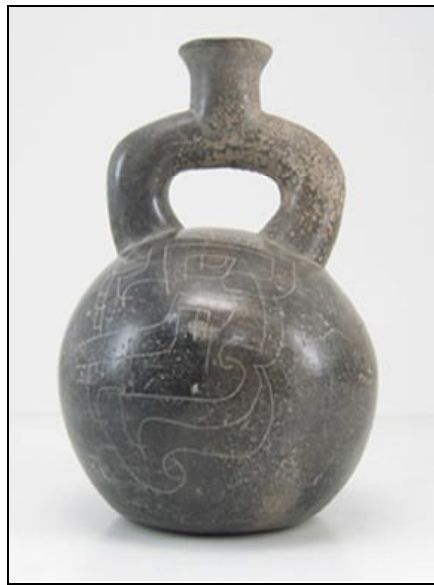


Figure 1.2 Incised Classic Cupisnique stirrup spout bottle



Figure 1.3 Modeled serpent, Classic Cupisnique style stirrup spout bottle

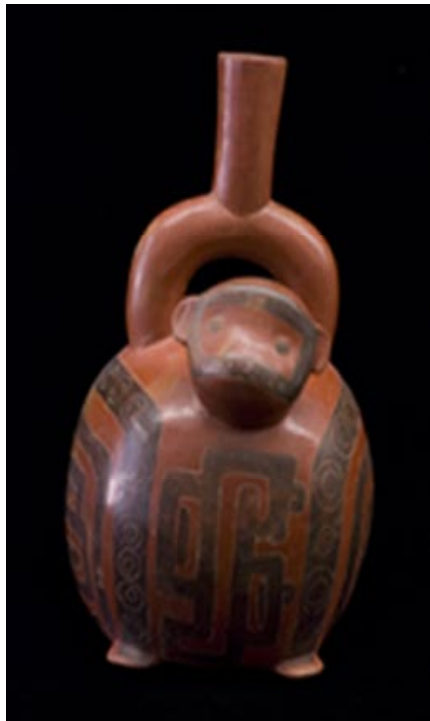


Figure 1.4 Monkey figure, 'Transitional' Cupisnique style stirrup spout bottle (Tecapa)





Figure 1.5 Incised avian form, Late Cupisnique style stirrup spout bottle



Figure 1.6 Cupisnique 'Santa Ana' style stirrup spout bottle

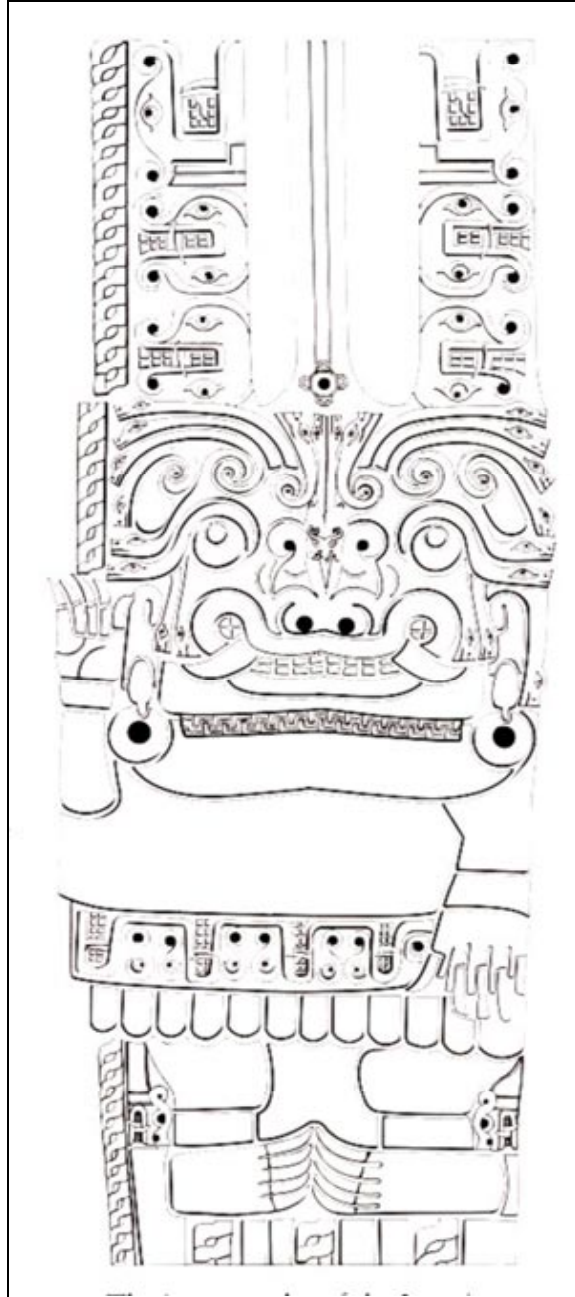


Figure 1.7 *Lanzón*, drawing of granite stele, Chavín de Huántar

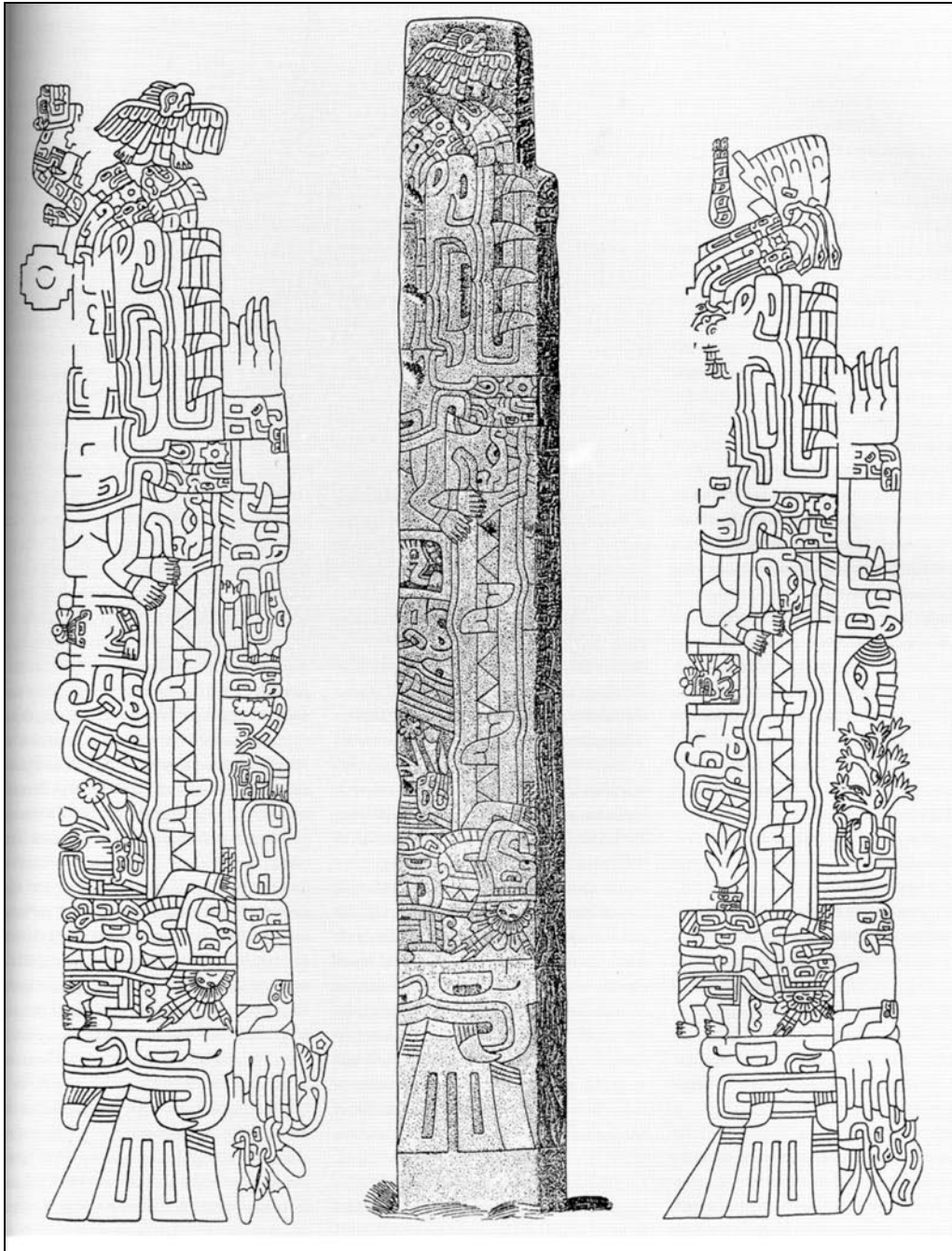


Figure 1.8 *Tello Obelisk*, drawing of carved stele, Chavín de Huántar

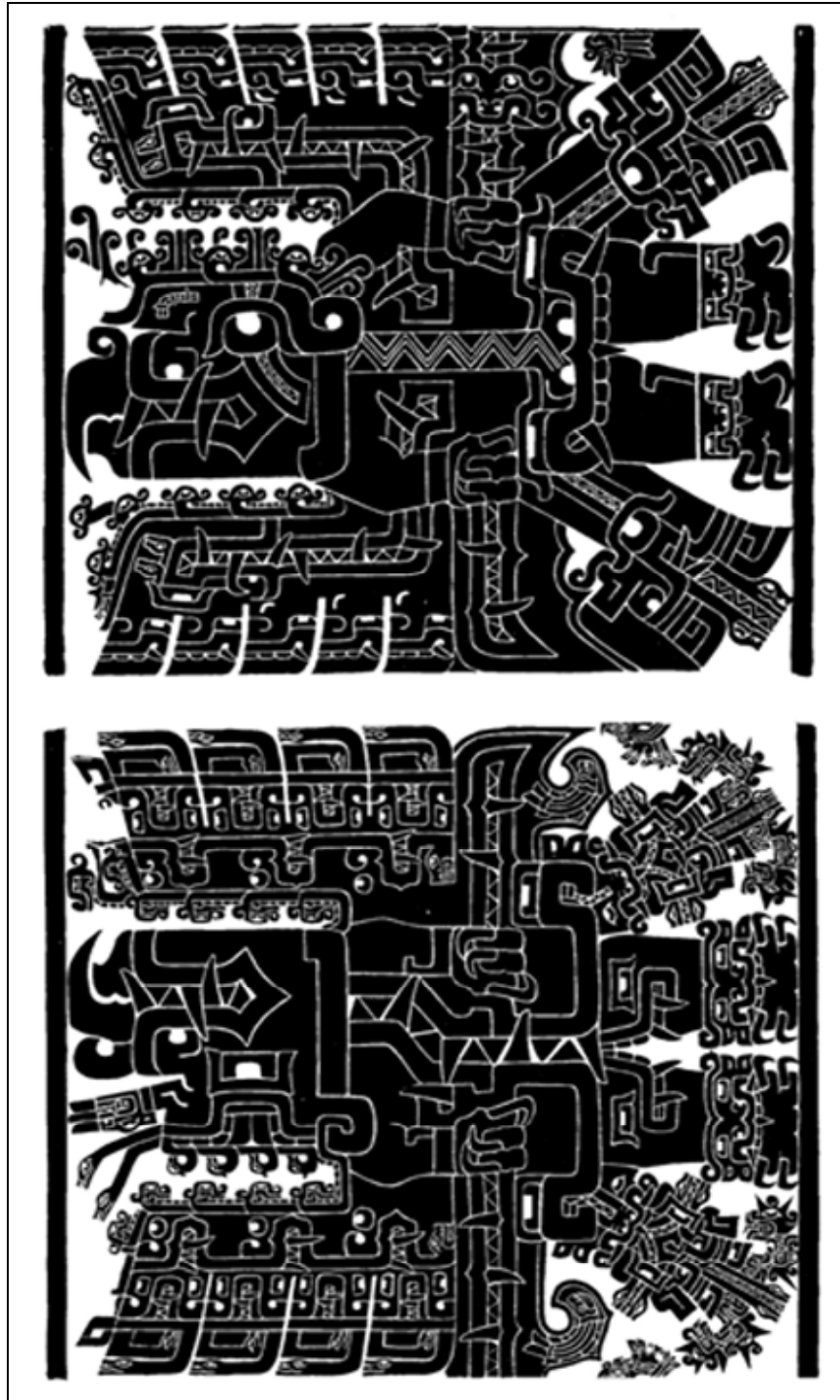


Figure 1.9 *Black and White Portal*, drawing of carved andesite columns, Chavín de Huántar

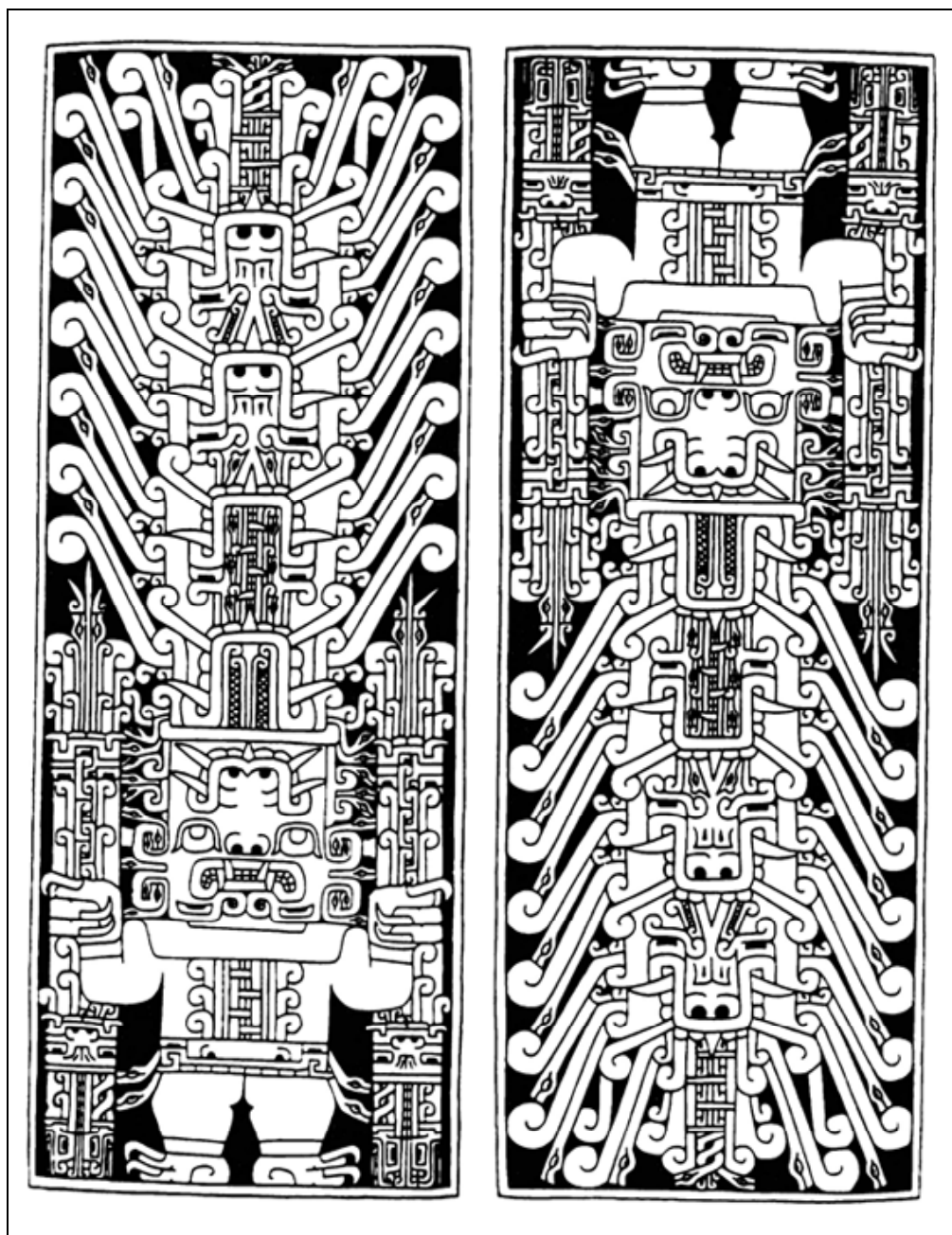


Figure 1.10 *Raimondi Stela* (original left, anatomic right), drawing of carved stone stele, Chavín de Huántar



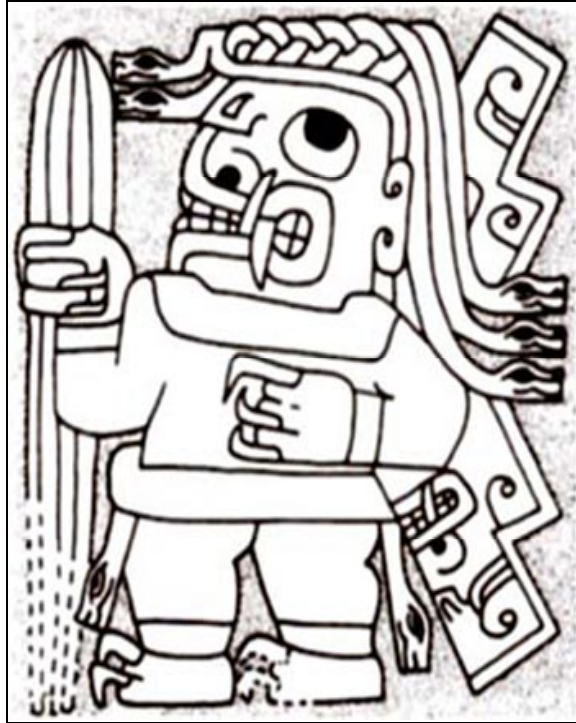


Figure 1.11 *Cactus Bearer*, drawing of carved ashlar, Circular Plaza, Chavín de Huántar



Figure 1.12 *Feline*, carved stone ashlar, Circular Plaza, Chavín de Huántar



Figure 1.13 *Smiling God*, carved stone ashlar, New Temple Plaza, Chavín de Huántar



Figure 1.14 Gold Crown, North coast



Figure 1.15 Individual holding isolated human head, carved stone block, from Yurayaku

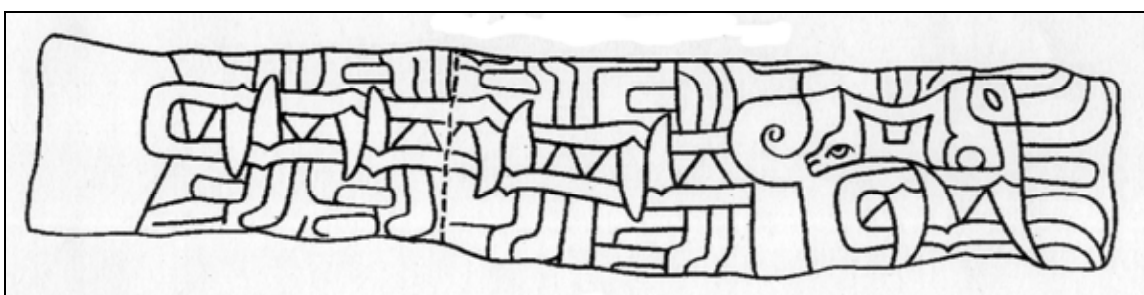


Figure 1.16 Zoomorphic form, drawing from carved stone block, Gotush





Figure 1.17 Profile individual with club, drawing of stone sculpture, from Cerro Sechín



Figure 1.18 Isolated head, stone sculpture, Cerro Sechín (Casma Valley)

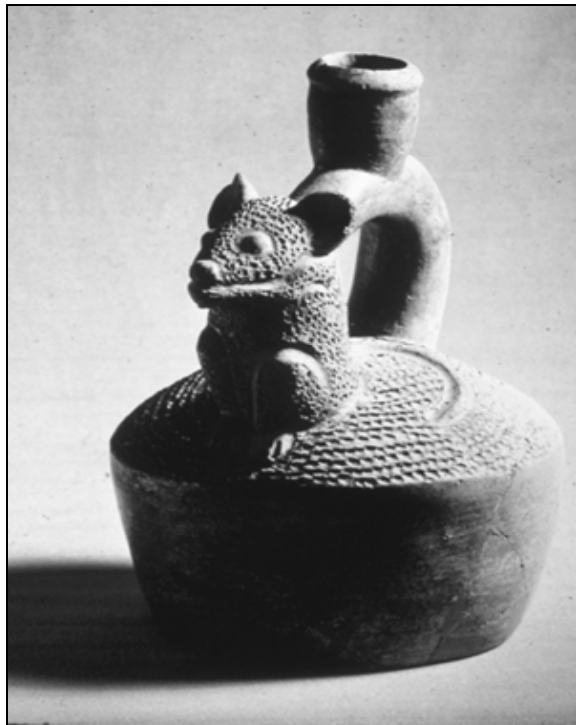


Figure 1.19 Rodent with hands at mouth, Chongoyape-style stirrup spout bottle



Figure 1.20 Spider Decapitator, drawing from stone bowl, Dumbarton Oaks



Figure 1.21 Spider-like composite figure, painted clay mural, Garagay (Rimac Valley).



Figure 1.22 *Pickman Strombus*, Brooklyn Museum



Figure 1.23 *Monolith 1*, drawing of both sides (Pedro Rojas Ponce), Kuntur Wasi





Figure 1.24 Sculpture 46-3, Kuntur Wasi

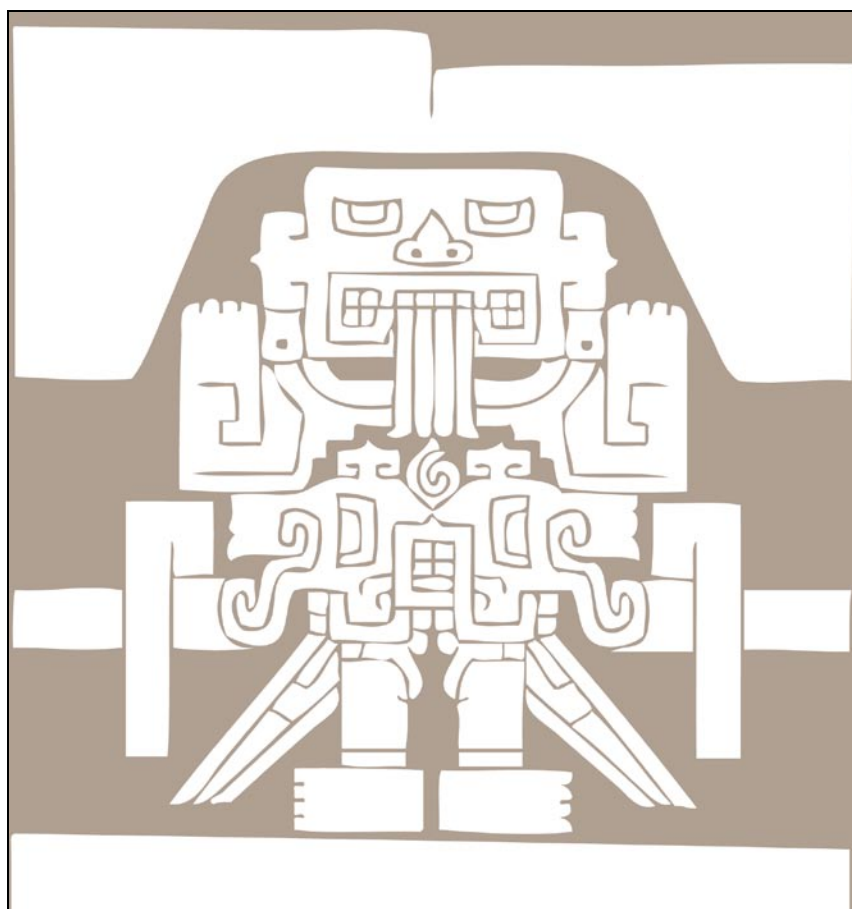


Figure 1.25 Individual with extensions, drawing of carved stele, from Pacopampa.

## CHAPTER 2



Figure 2.1 Outstretched avian figures, drawing of sculpted cornice, Chavín de Huántar



Figure 2.2 *New Temple Cornice*, drawing of sculpted cornice, Chavín de Huántar

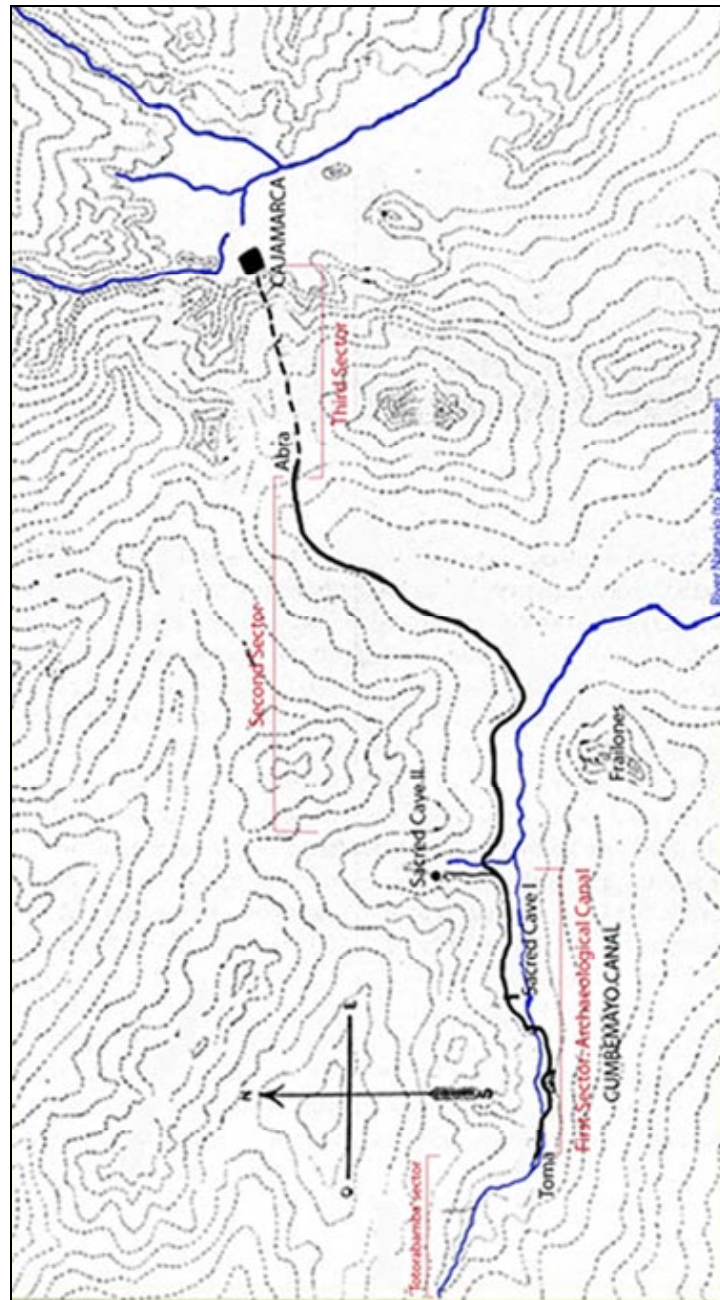


Figure 4.1 Map of Cumbemayo Canal Hydraulic System





Figure 4.2 General view, *Toma* and Section I of Cumbemayo Canal



Figure 4.3 *Totorabamba* region, prior to Section I



Figure 4.4 *Seksemayo* region, Section I of canal



Figure 4.5 Zigzag design, Section I, Cumbemayo Canal



Figure 4.6 *Los Frailones*, general view looking southeast



Figure 4.7 *Altuyojo*, general view looking west





Figure 4.8 Section II, general view looking northeast



Figure 4.9 Cerro Consejo, general view looking north



Figure 4.10 San Vicente quebrada, general view looking east

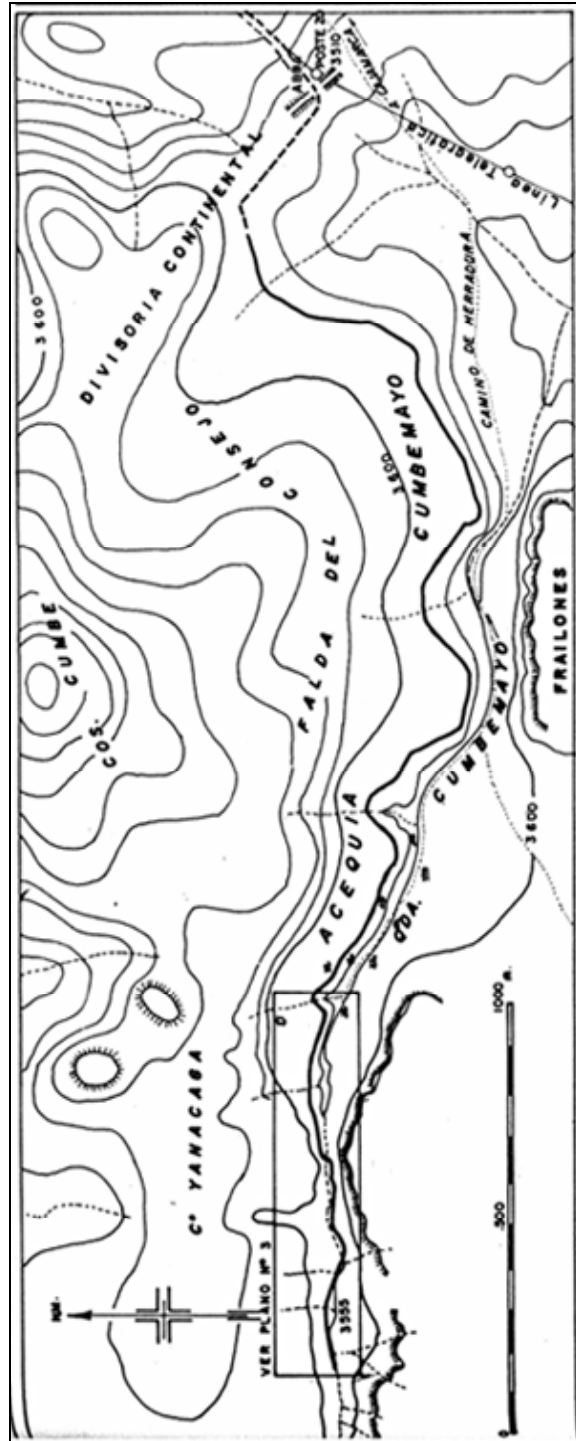


Figure 4.11 Topographic Map, first two sections 1947





Figure 4.12 Sacred Cave I, general view looking north



Figure 4.13 Sacred Cave II, general view looking northwest

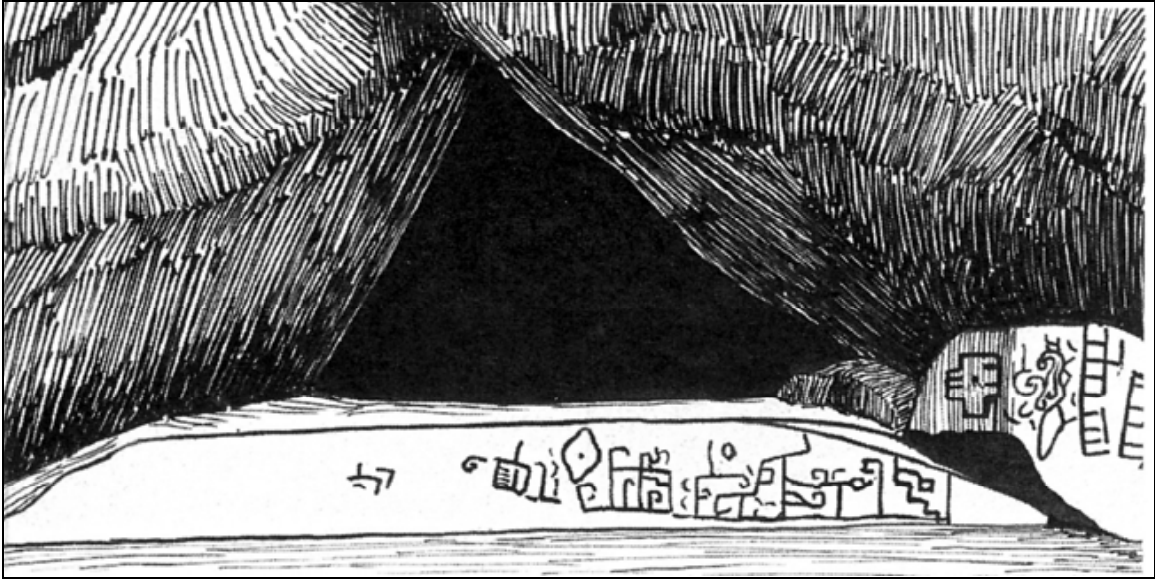


Figure 4.14 Sacred Cave I, drawing by Marañón Expedition 1937

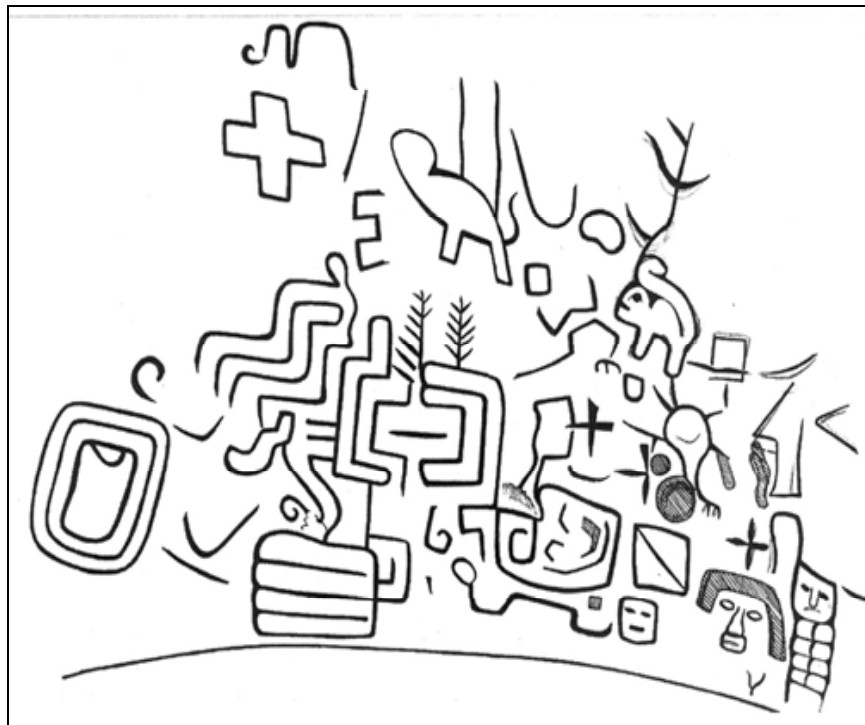


Figure 4.15 Sacred Cave II (Sanctuary), drawing by Marañón Expedition 1937





Figure 4.16 Complex Petroglyph, drawing by Marañón Expedition 1937

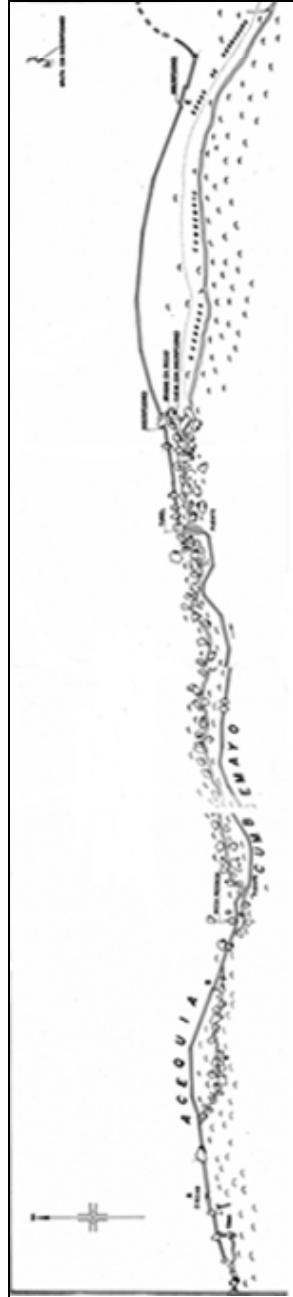


Figure 4.17 Plan of Section I, 1947



Figure 4.18 Photograph of Complex Petroglyph 1947



Figure 4.19 Complex Petroglyph, drawing from rubbing 1972-1979



Figure 4.20 Sacred Cave II (Sanctuary), drawing of wall petroglyphs 1972-1979



Figure 4.21 Concrete modern canal, second sector, general view looking southeast



Figure 4.22 *Abra* at the Continental Divide, Sections II-III, view to southwest



Figure 4.23 Concrete canal at Agua Tapada community, Cumbemayo Hydraulic system, view looking northeast





Figure 4.24 Stone blocks at *Toma*, Units 3A and 3B, looking west



Figure 4.25 Stone blocks in Unit 2B, *Toma* sector, Cumbemayo Canal



Figure 4.26 Petroglyph triangle form, *Toma* sector stone blocks, Cumbemayo Canal



Figure 4.27 Rough brown ware ceramic sherds, *Toma* sector, Cumbemayo Canal





Figure 4.28 Incised and post-fire painted ceramic sherds, *Toma* sector



Figure 4.29 Canal Intake (below) and 'Throne' (above), Cumbemayo Canal



Figure 4.30 Graffiti at Wall Group II, Cumbemayo Canal

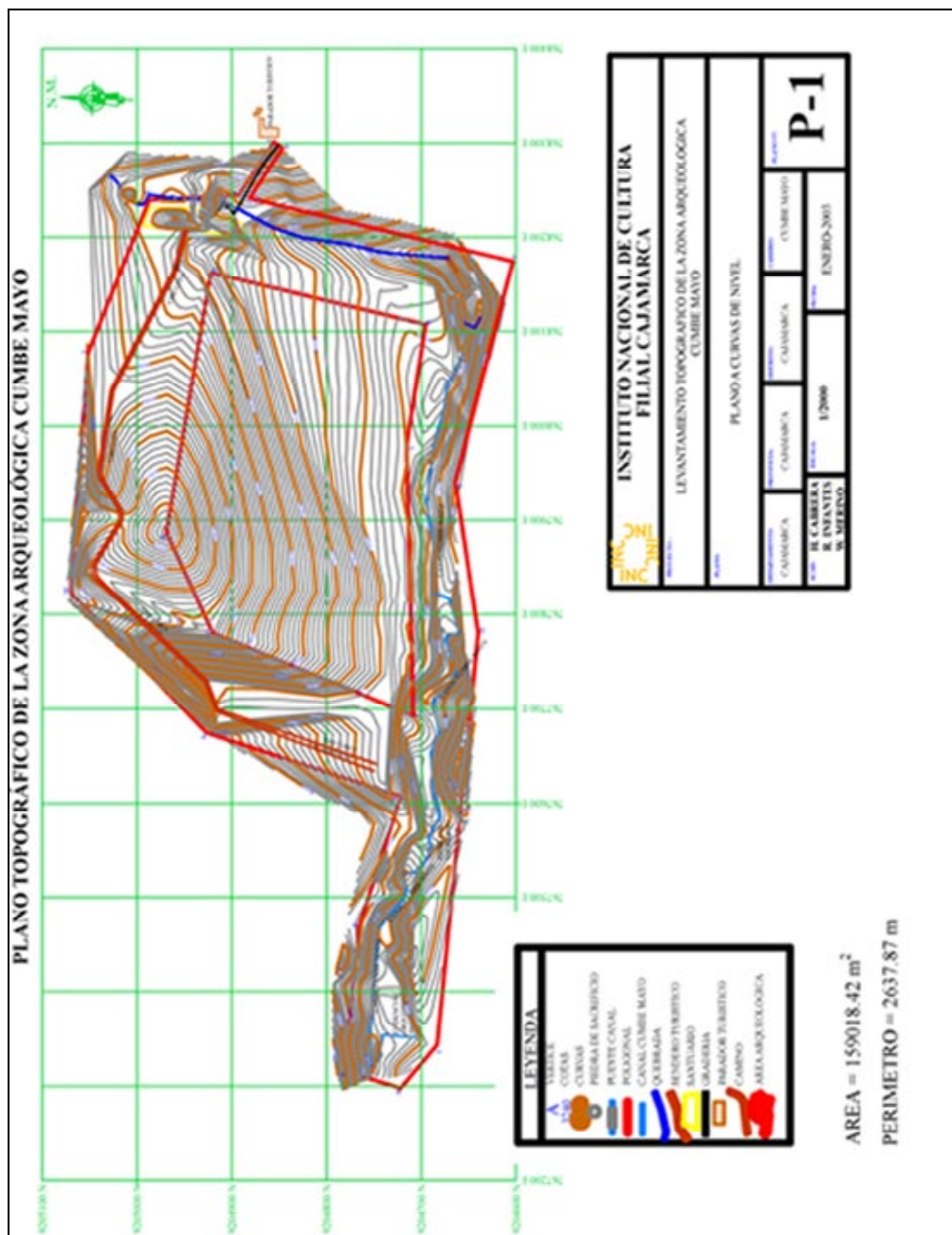


Figure 4.31 Digital Topographic Map 2003, Tourist Section I Cumbemayo Canal

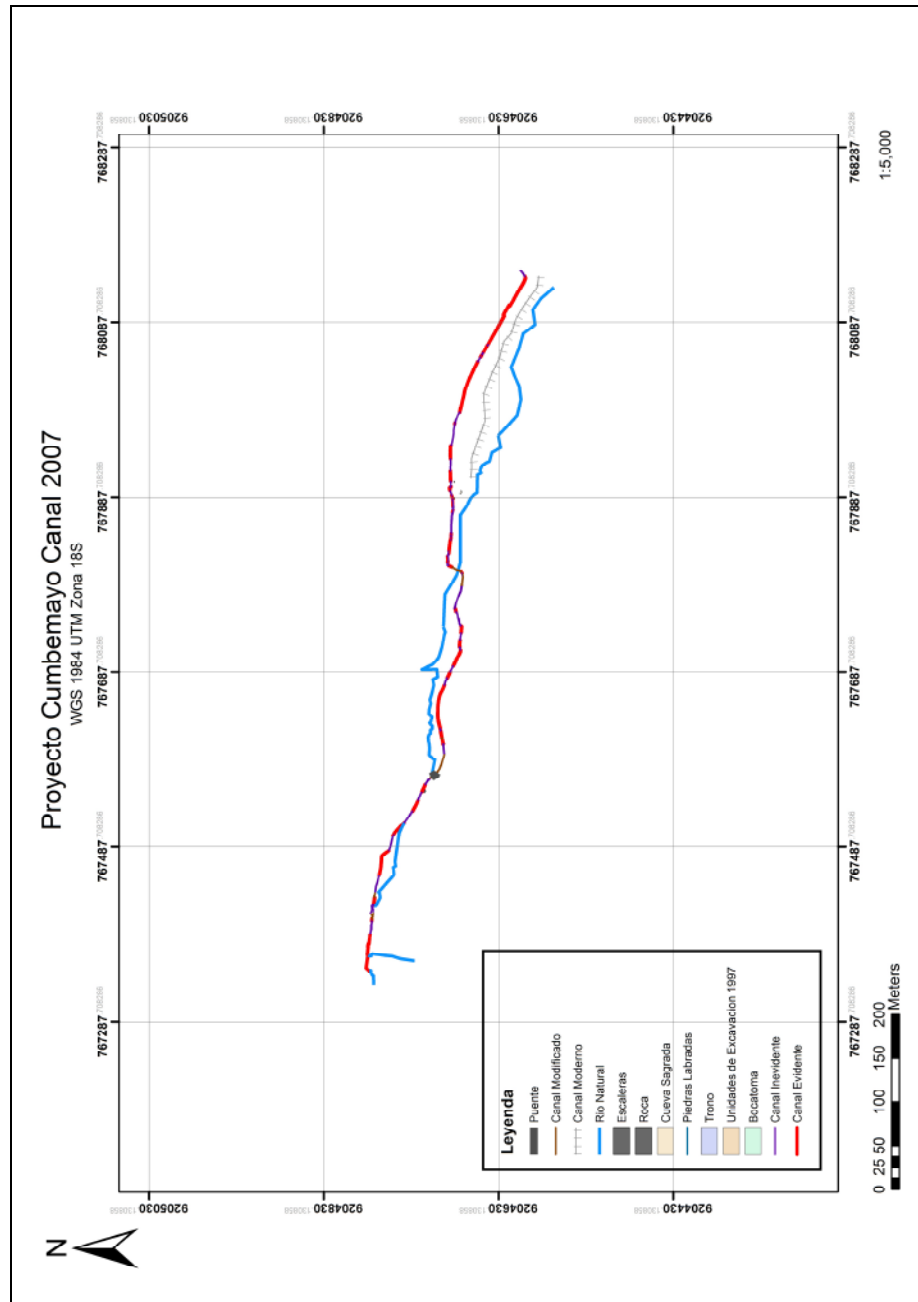


Figure 4.32 Digital map of Section I, Project Cumbemayo Canal 2007, 1:5000 m

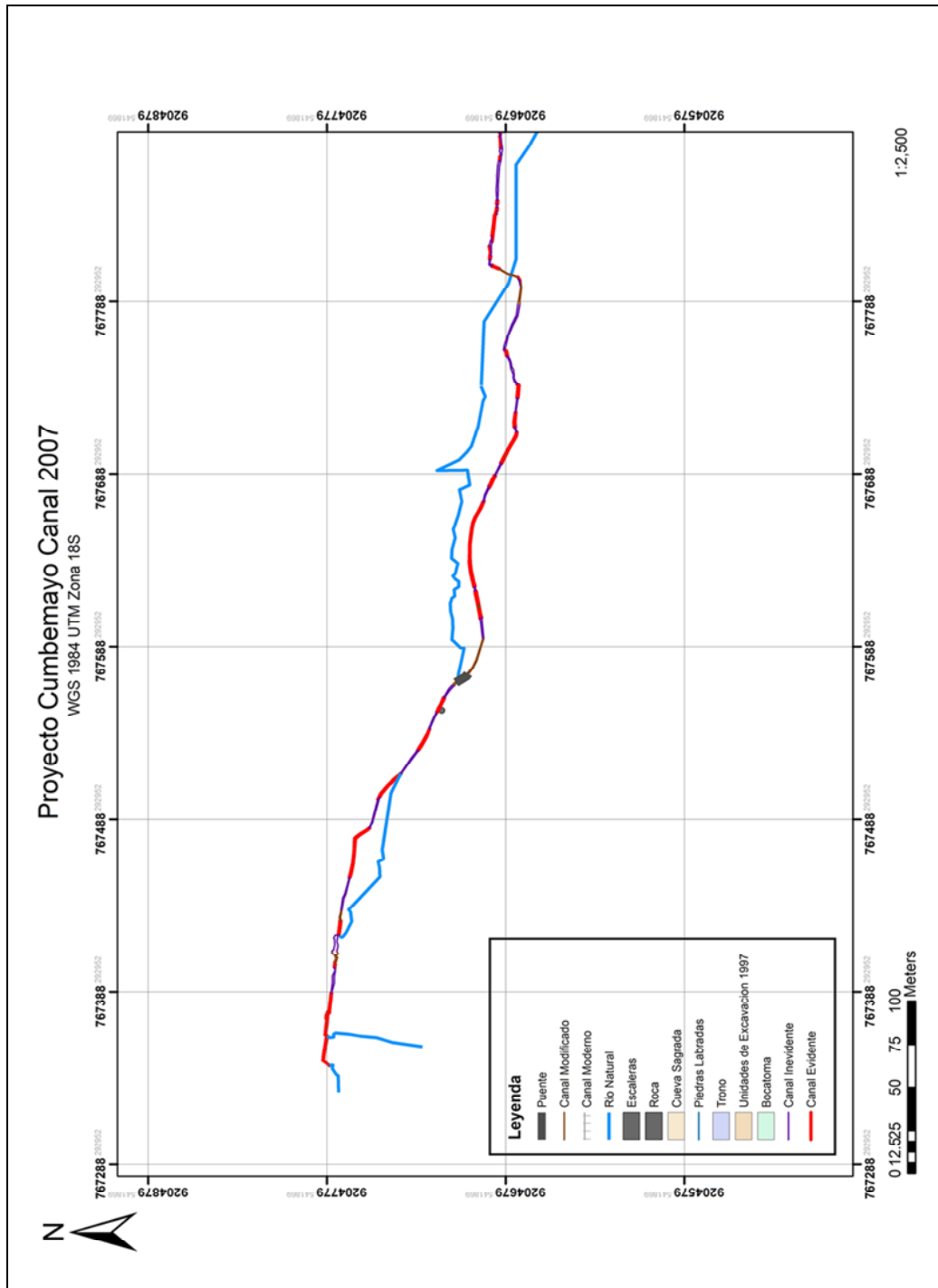


Figure 4.33 Digital Map of Project Canal Cumbemayo

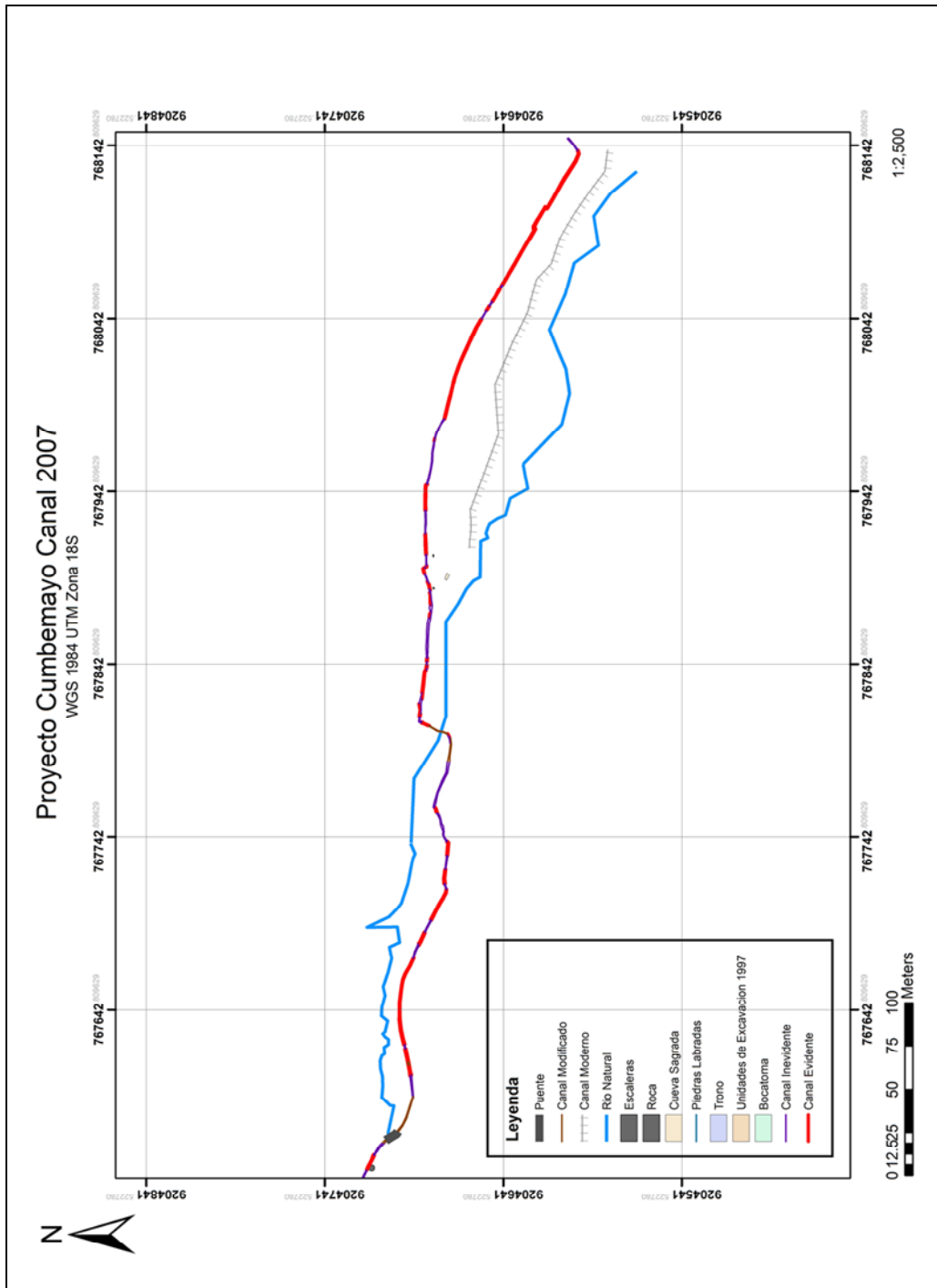


Figure 4.34 Digital Map of Section I, Project Cumbemayo Canal 2007

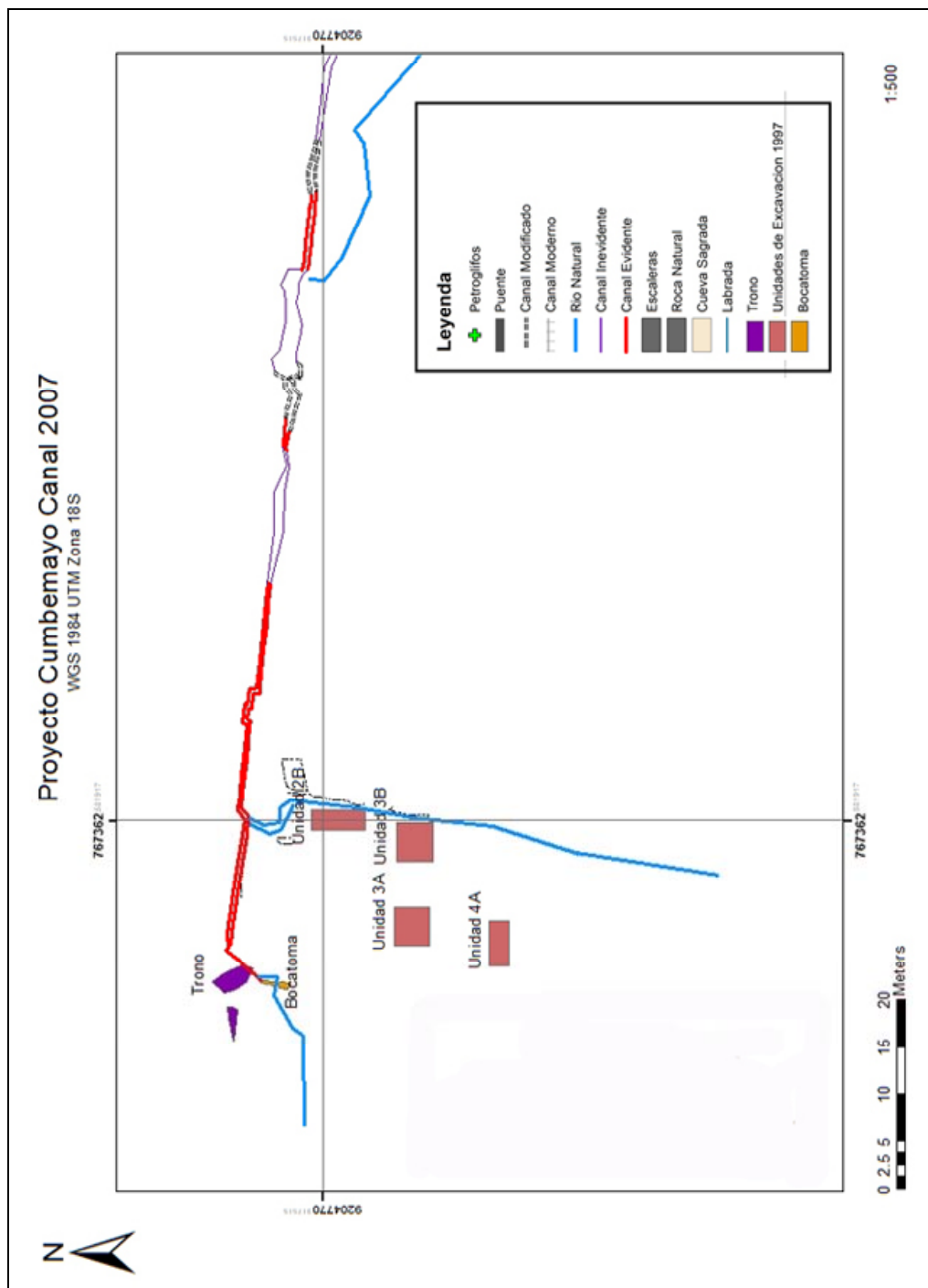


Figure 4.35 Digital Map of *Toma*, Project Cumbemayo Canal 2007

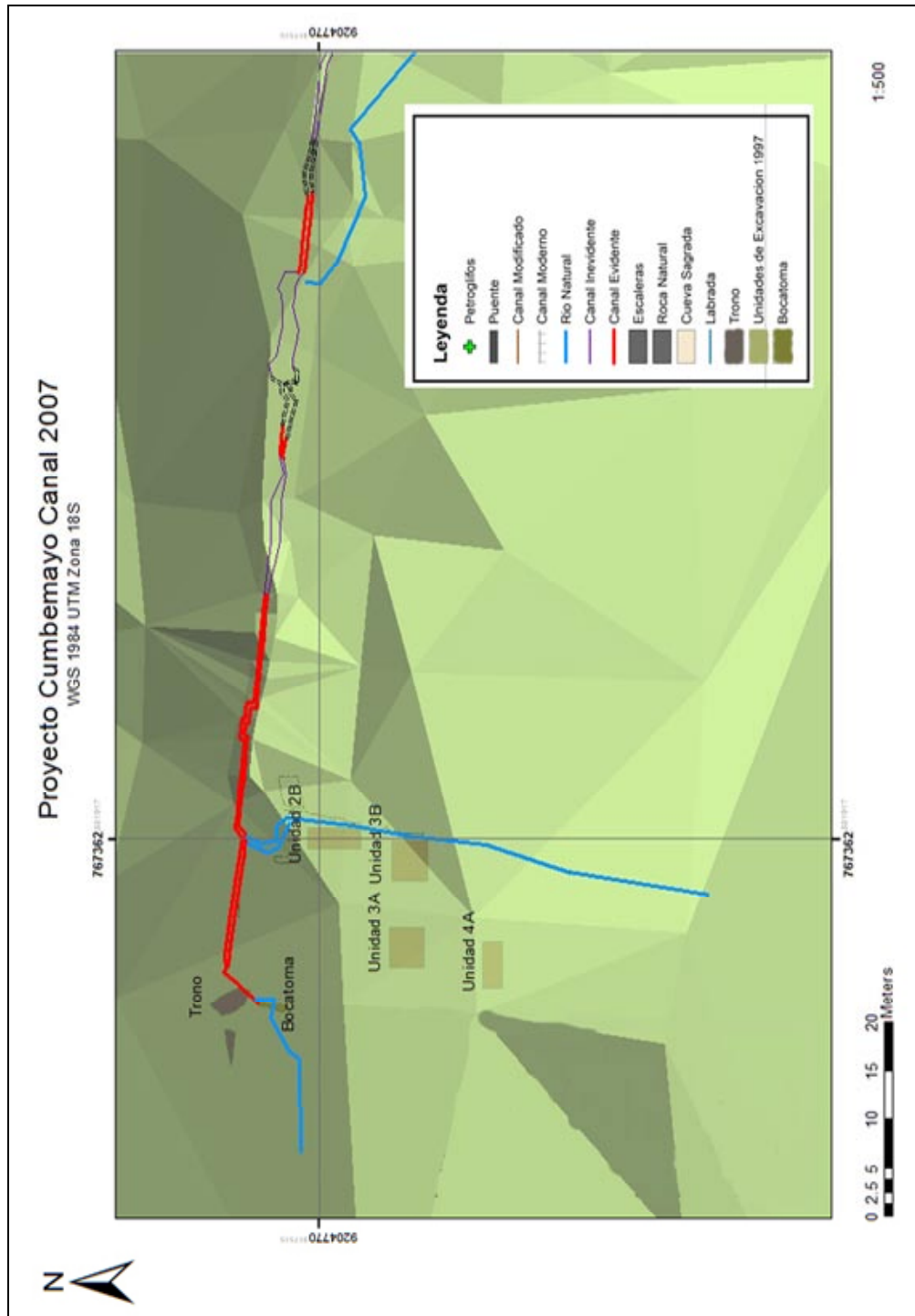


Figure 4.36 Digital Map of *Toma*, Project Cumbemayo Canal 2007



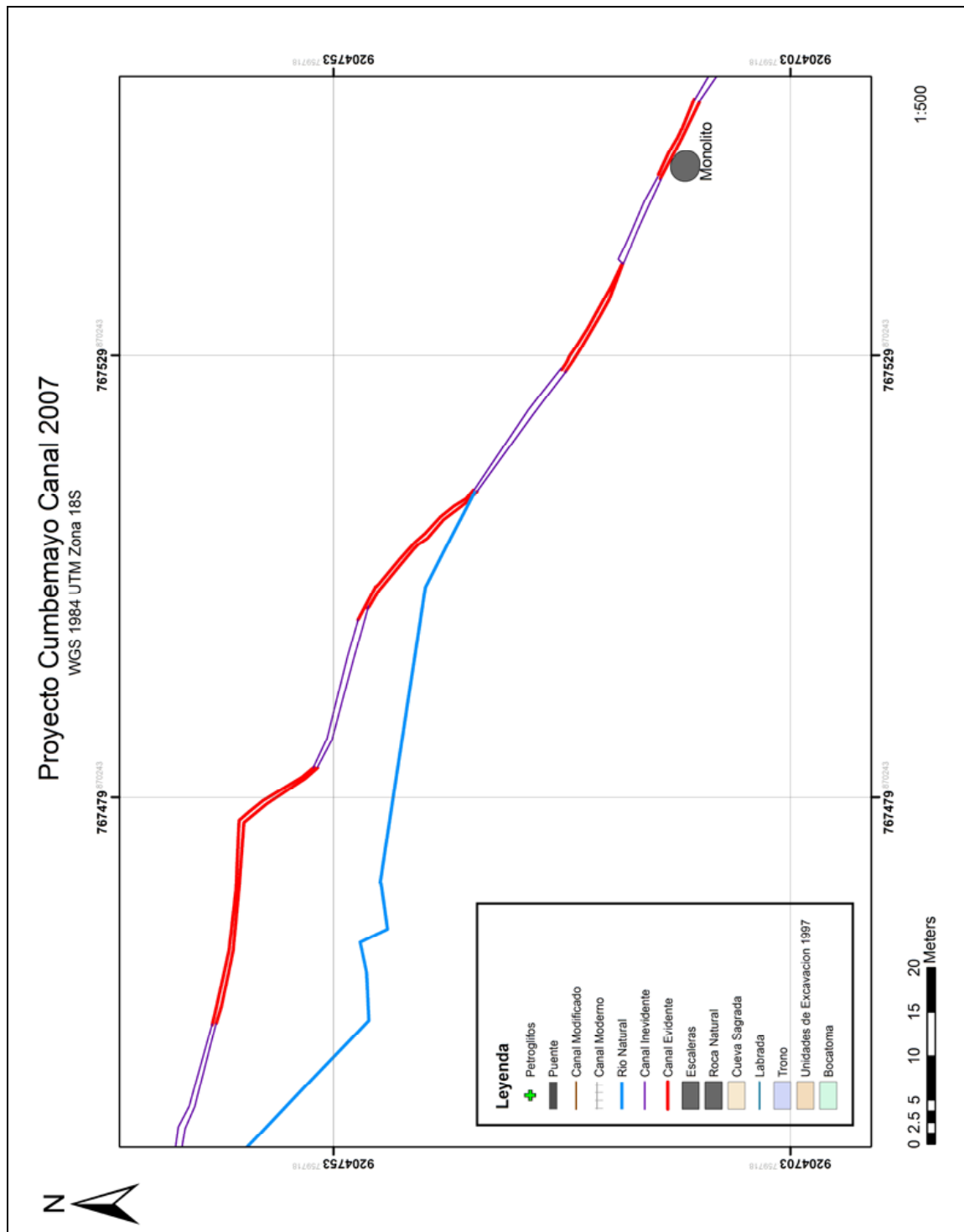


Figure 4.37 Digital Map of Section I, Project Cumbemayo Canal 2007

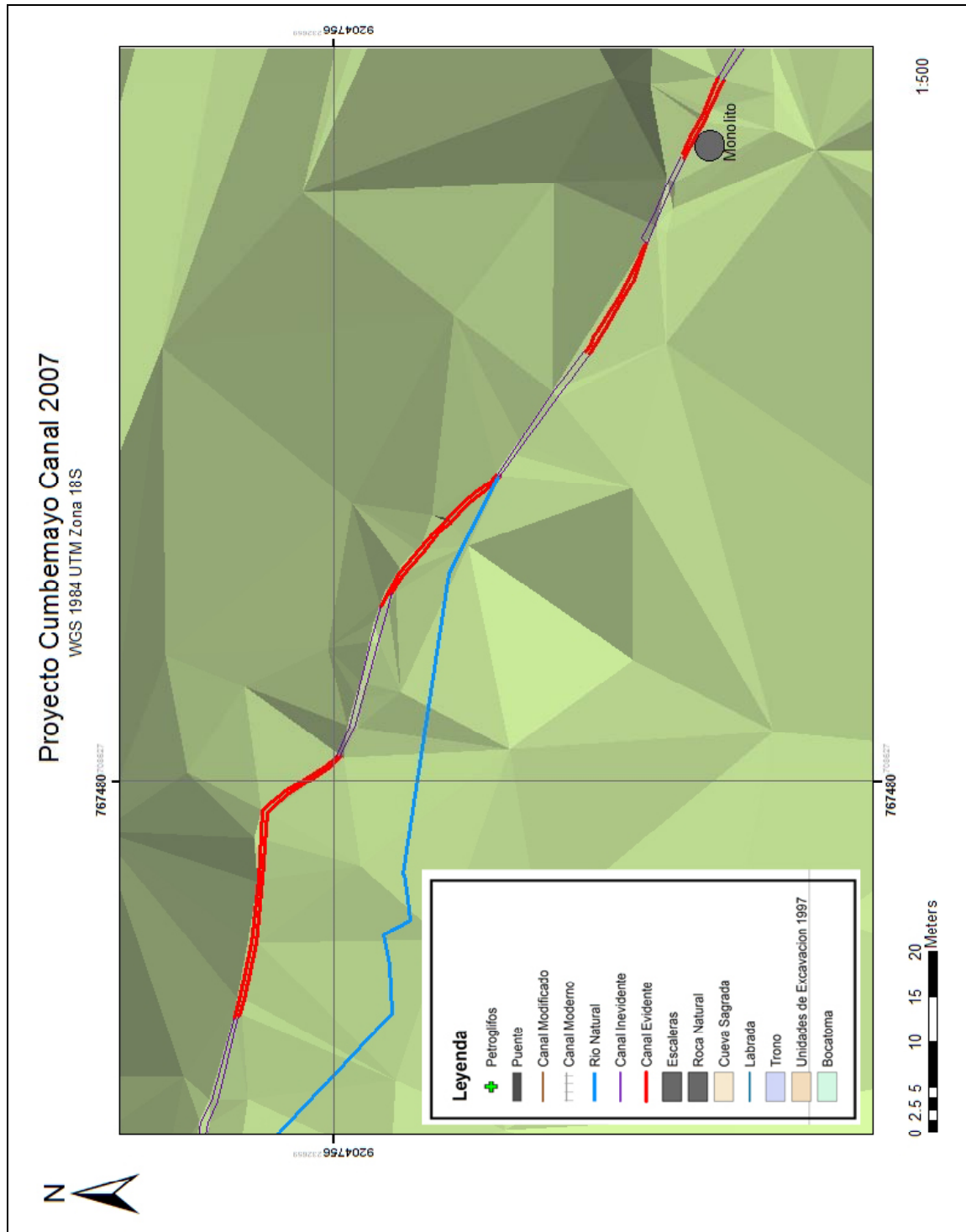


Figure 4.38 Digital Map of Section I, Project Cumbemayo Canal 2007

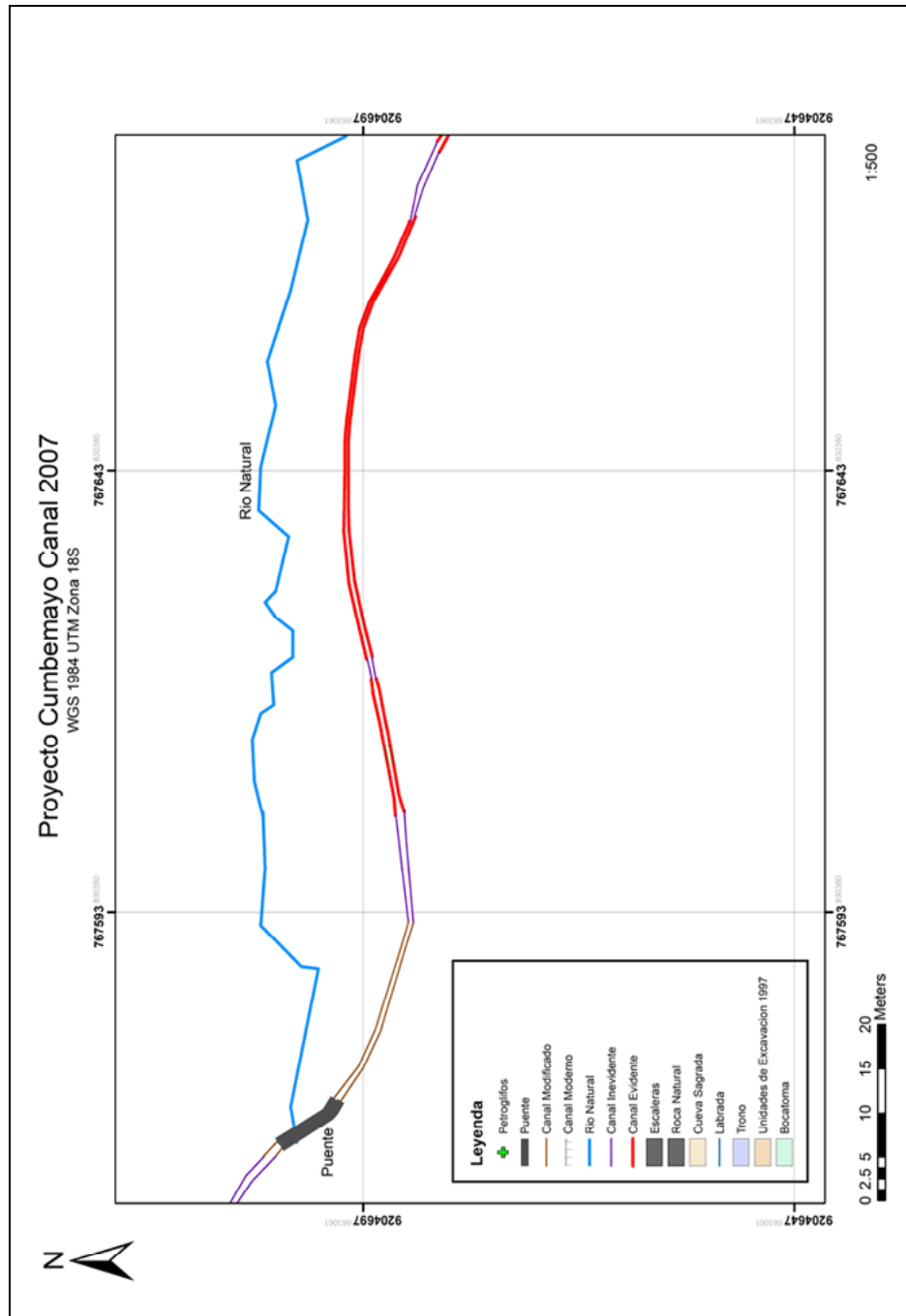


Figure 4.39 Digital Map of Section I, Project Cumbemayo Canal 2007

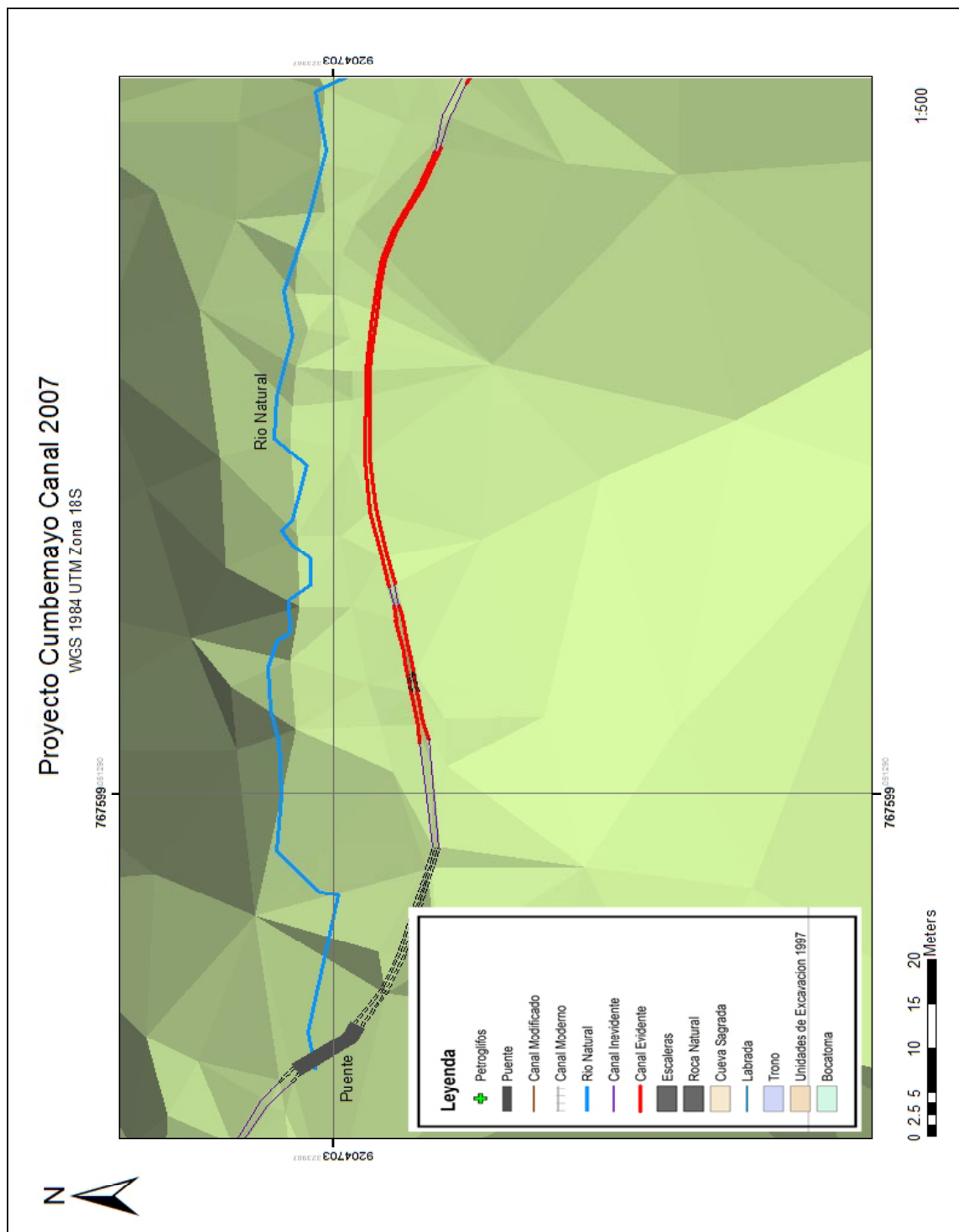


Figure 4.40 Digital Map of Section I, Project Cumbemayo Canal 2007

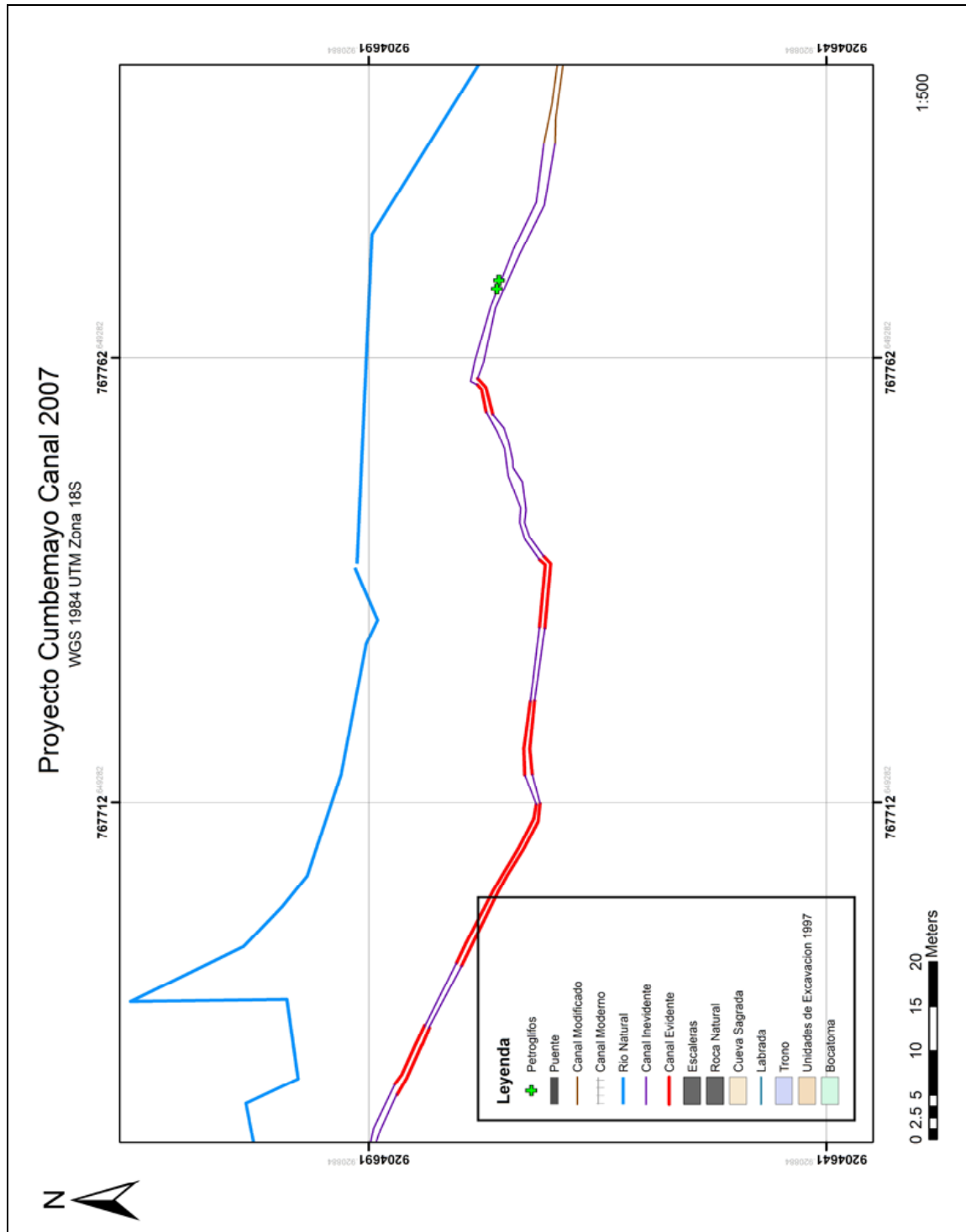


Figure 4.41 Digital Map of Section I, Project Cumbemayo Canal 2007

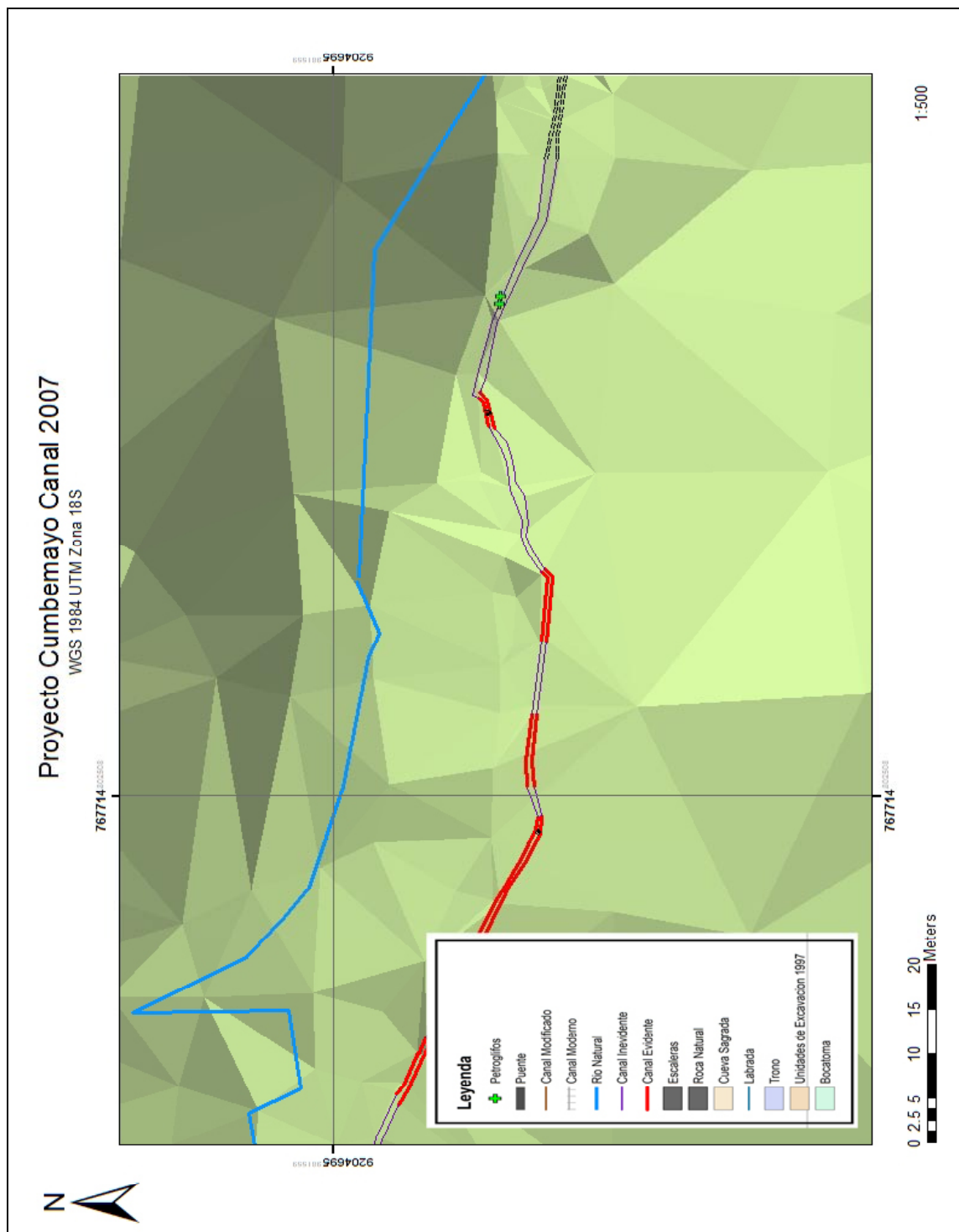


Figure 4.42 Digital Map of Section I, Project Cumbemayo Canal 2007

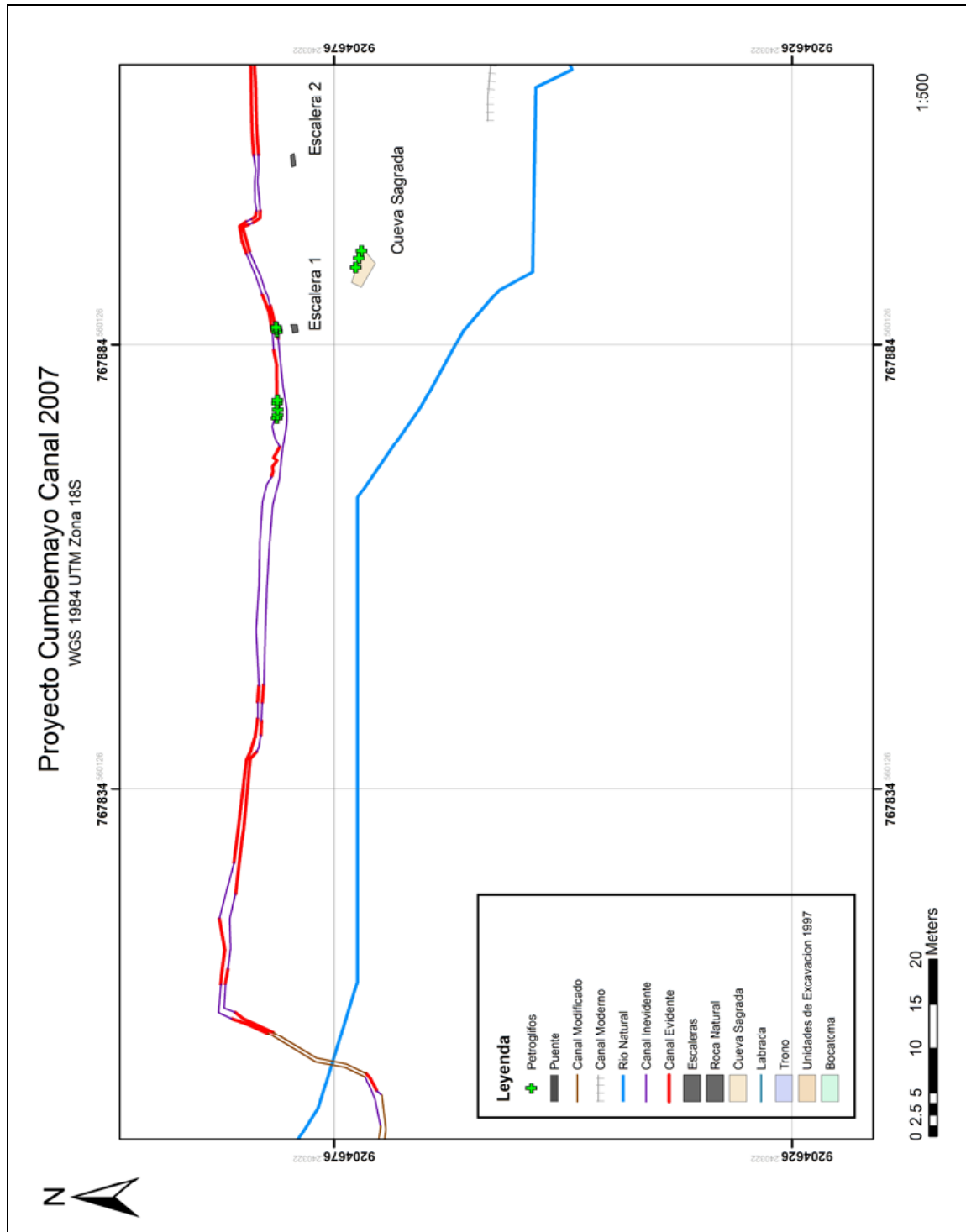


Figure 4.43 Digital Map of Section I, Project Cumbemayo Canal 2007

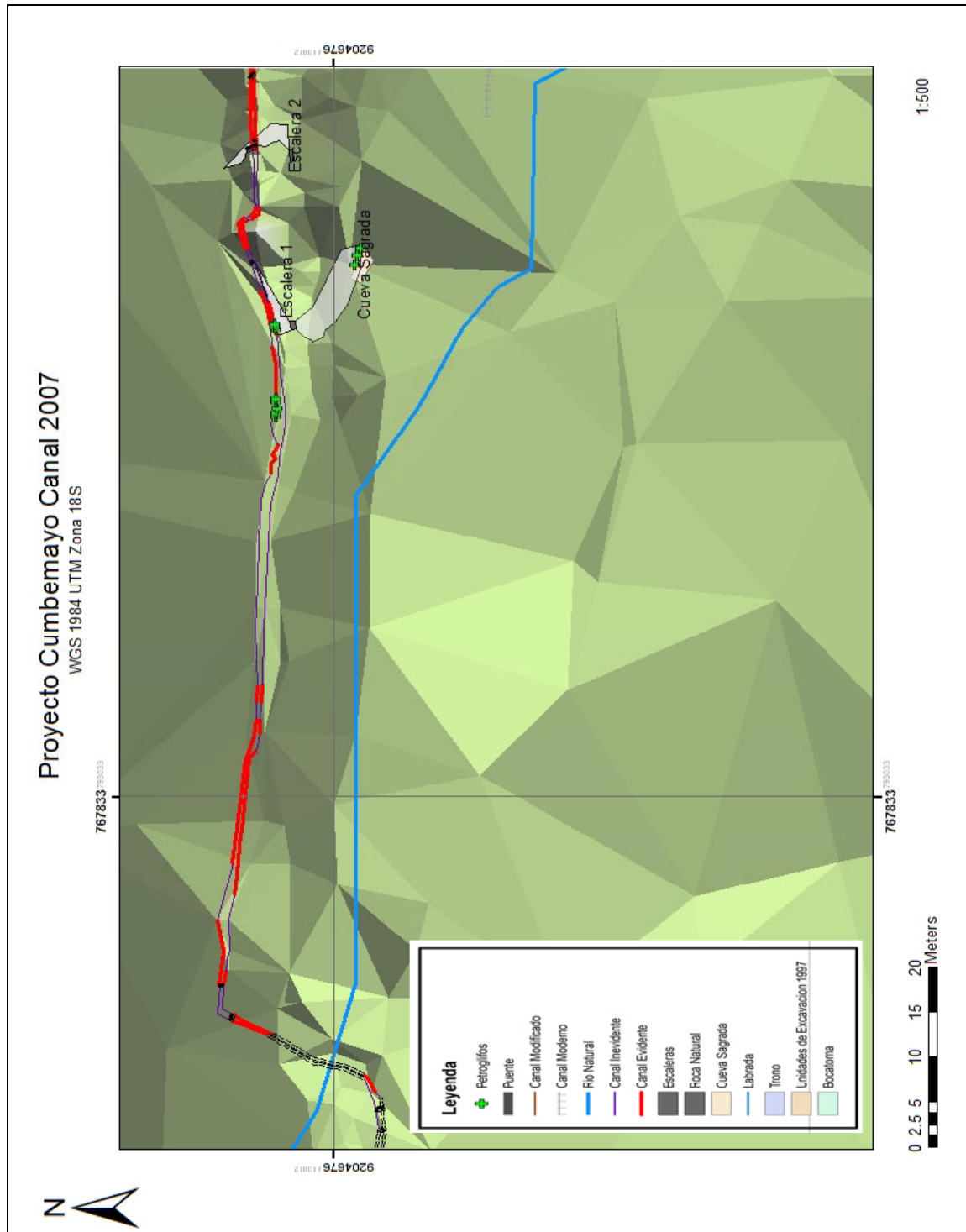


Figure 4.44 Digital Map of Section I, Project Cumbemayo Canal 2007



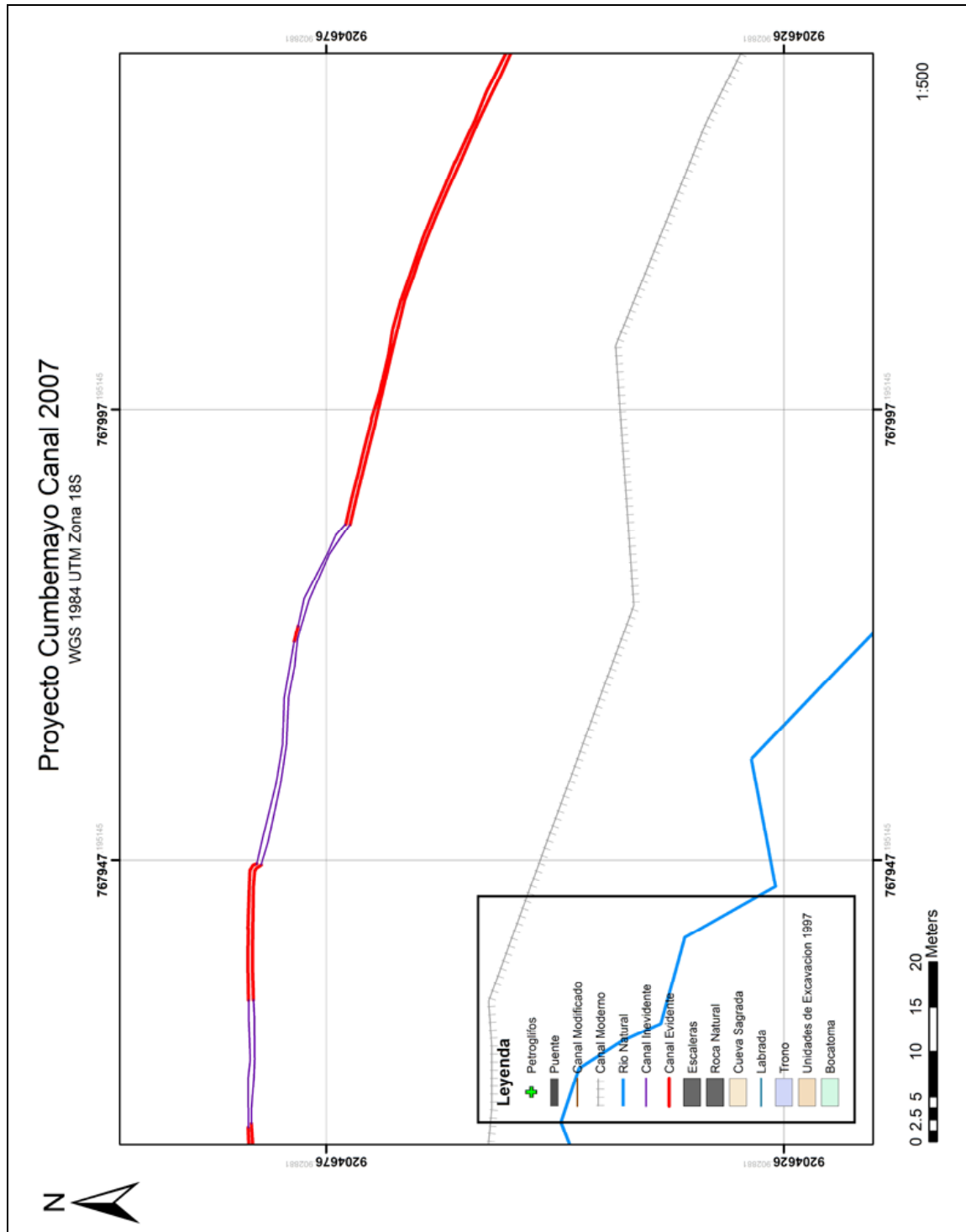


Figure 4.45 Digital Map of Section I, Project Cumbemayo Canal 2007

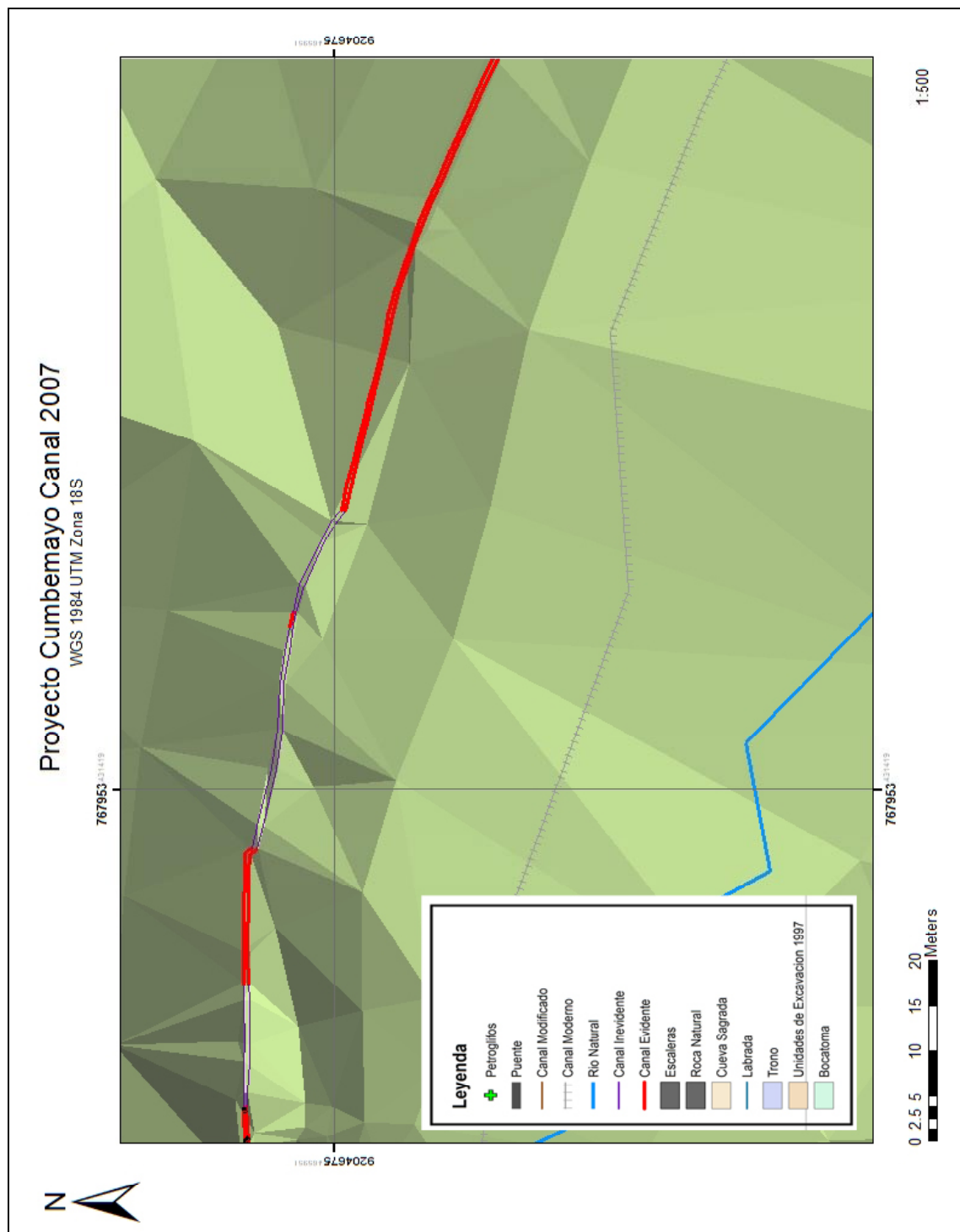


Figure 4.46 Digital Map of Section I, Project Cumbemayo Canal 2007

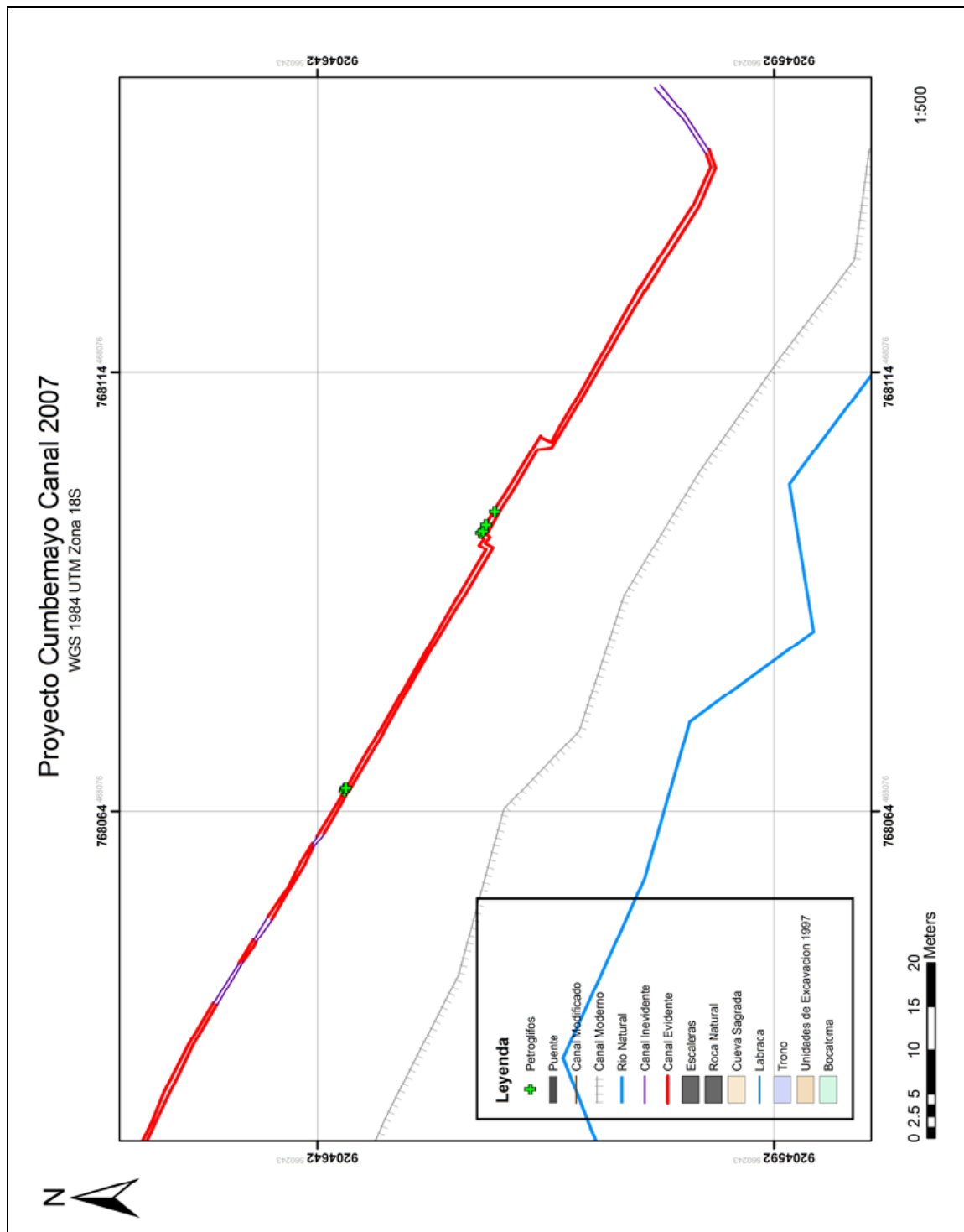


Figure 4.47 Digital Map of Section I, Project Cumbemayo Canal 2007



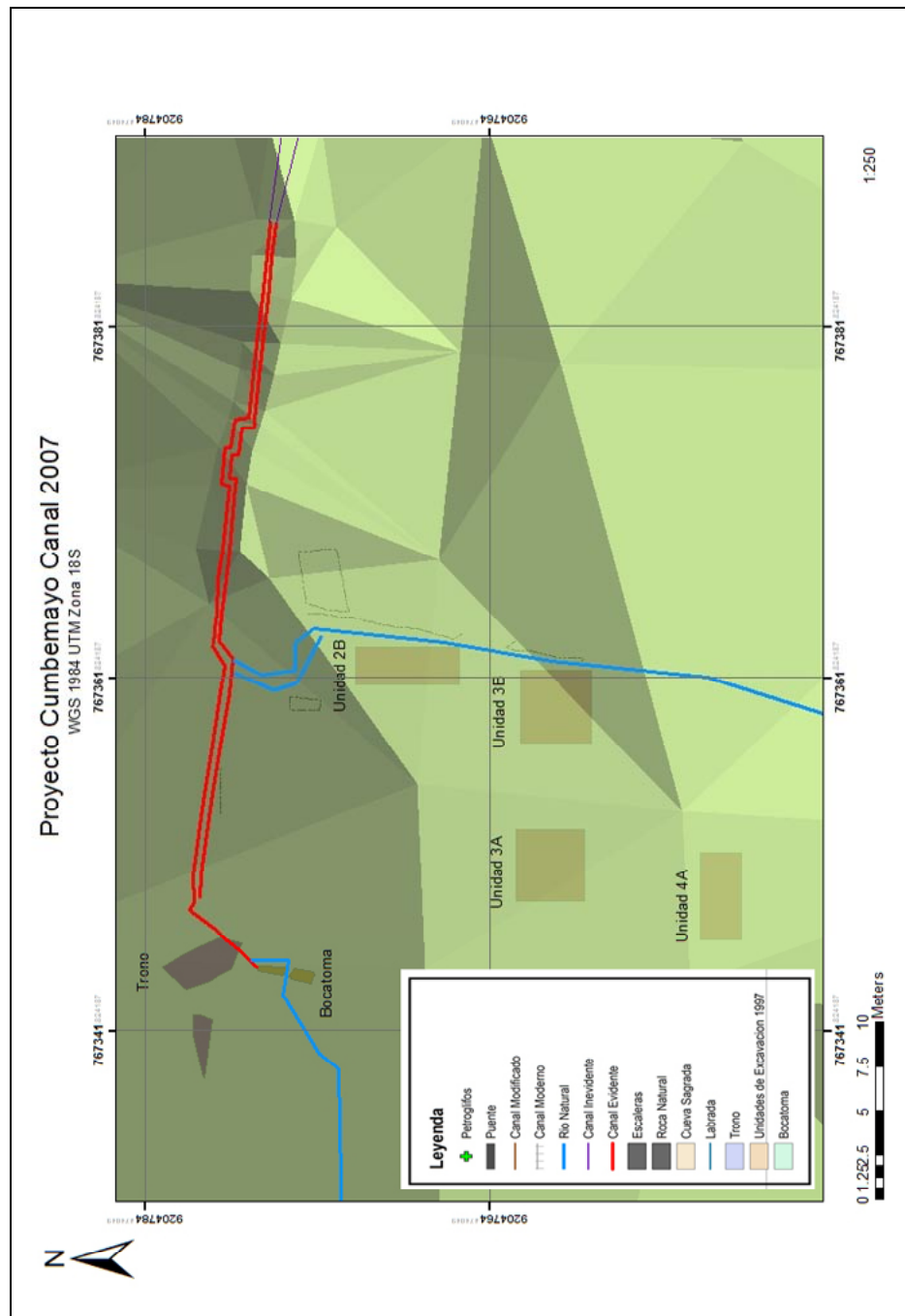


Figure 4.49 *Toma Sector*, Project Cumbemayo Canal 2007

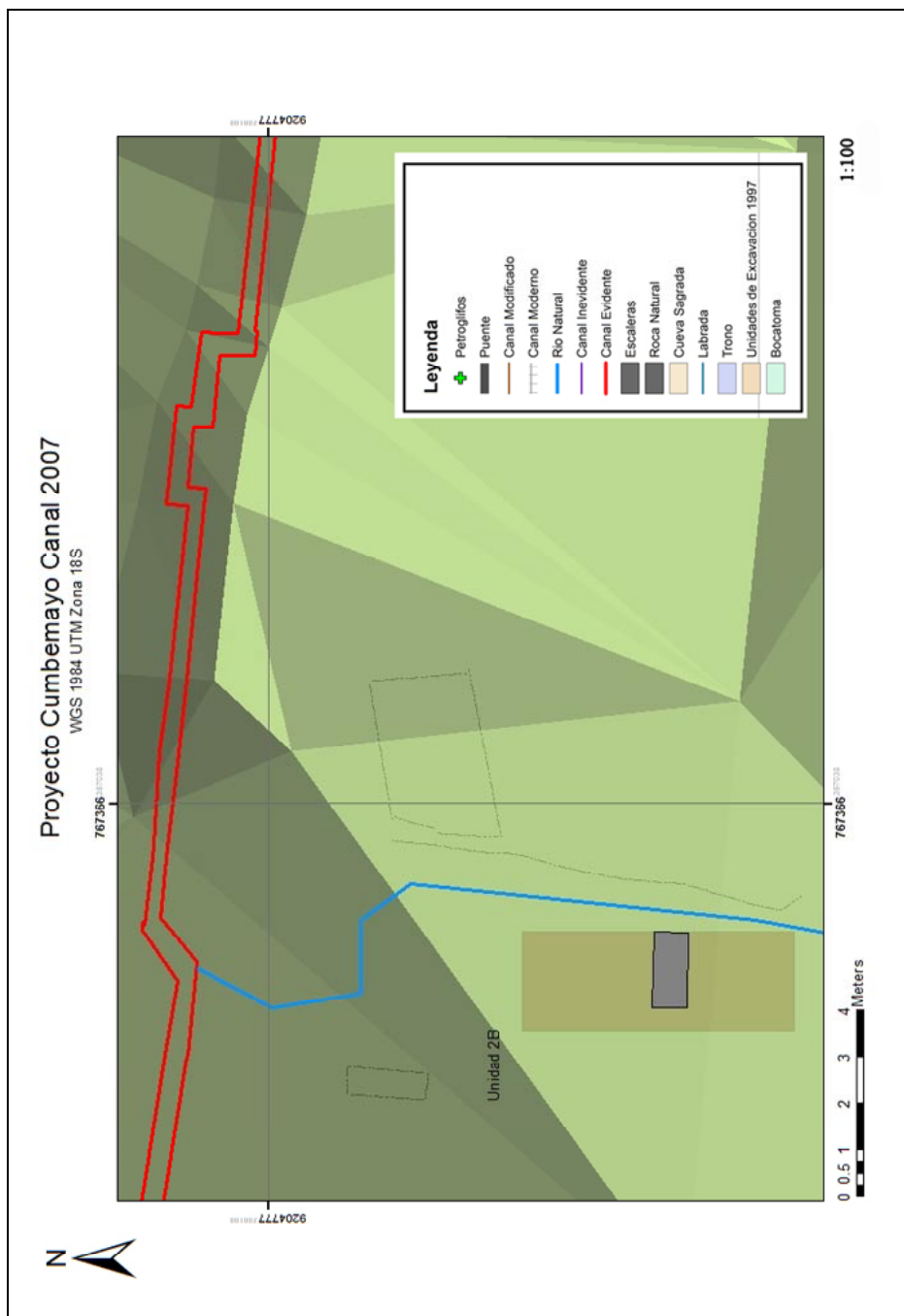


Figure 4.50 Unit 2B Stone block, Project Cumbemayo Canal 2007

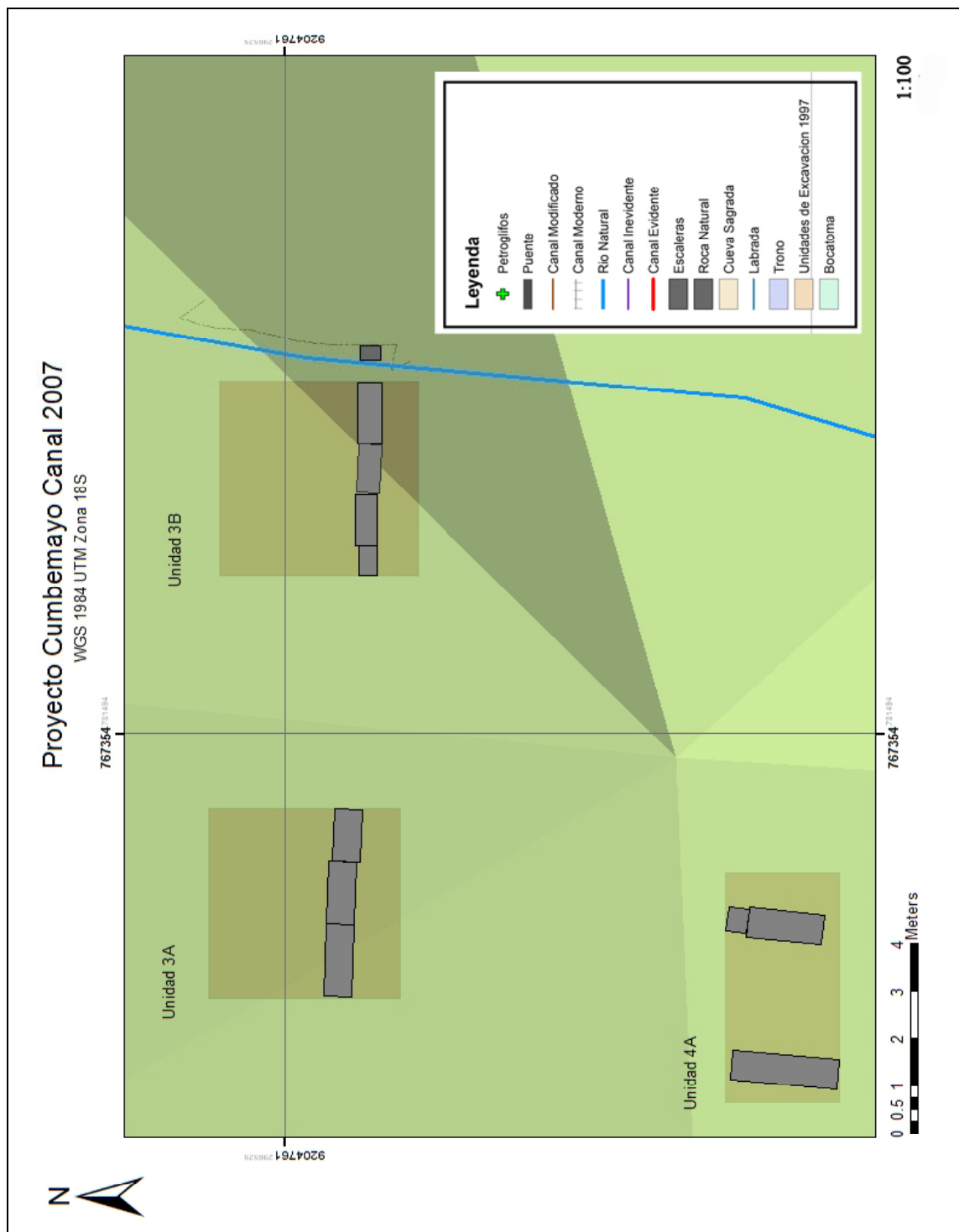


Figure 4.51 Units 3A, 3B, and 4A Stone blocks, Project Cumbemayo Canal 2007

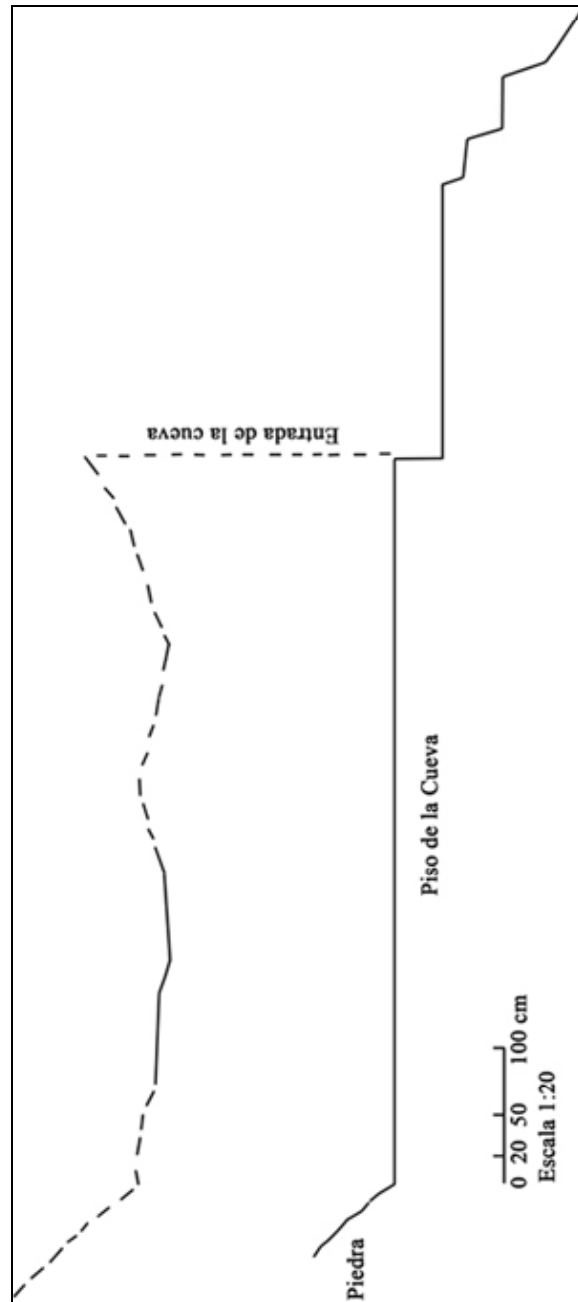


Figure 4.52 Sacred Cave I, profile drawing, Project Cumbemayo Canal 2007



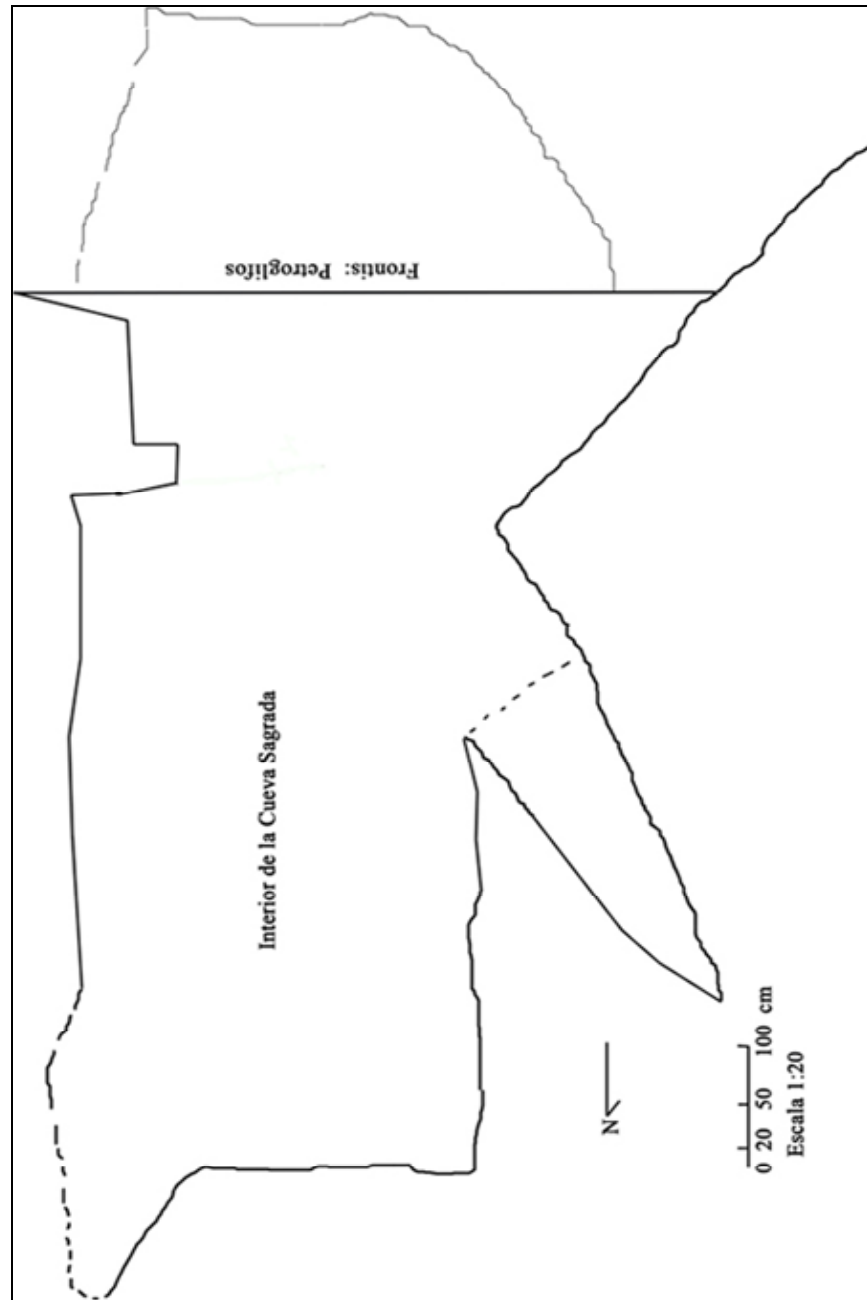


Figure 4.53 Sacred Cave I, plan drawing, Project Cumbemayo Canal 2007

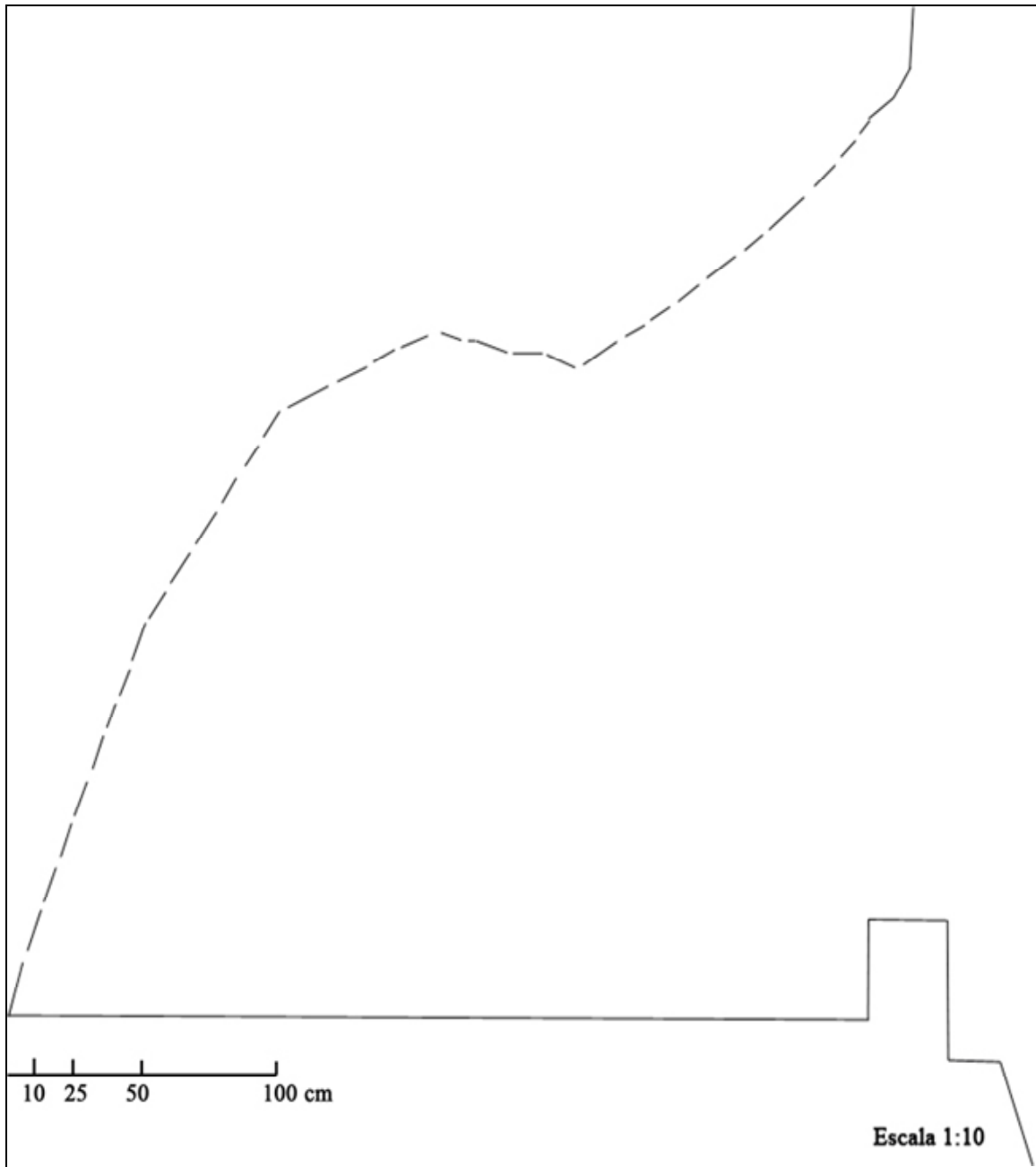


Figure 4.54 Sacred Cave II (Sanctuary), profile drawing, Project Cumbemayo Canal 2007

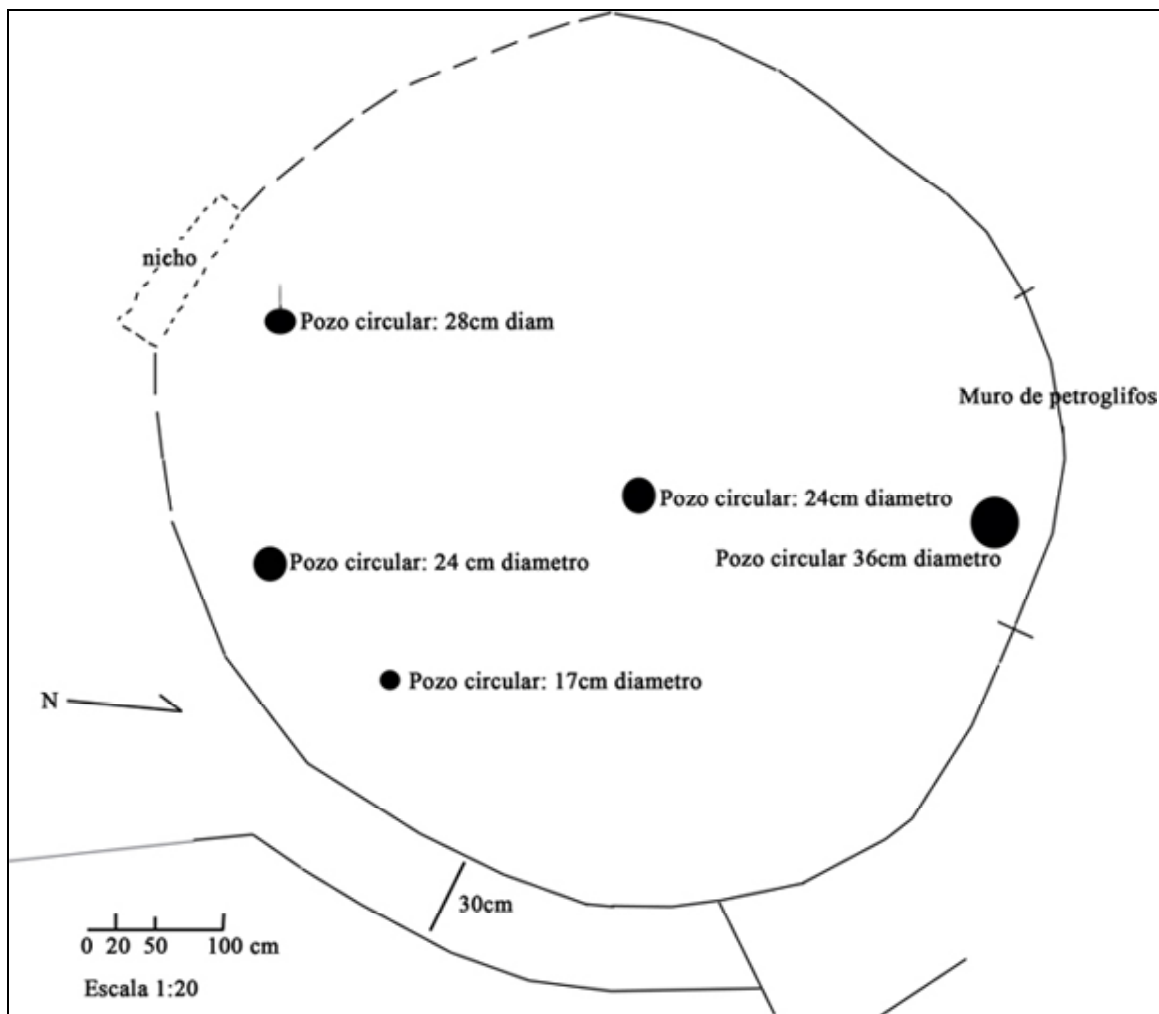


Figure 4.55 Sacred Cave II (Sanctuary), plan of floor, Project Cumbemayo Canal 2007



Figure 4.56 Step design on 'Throne'

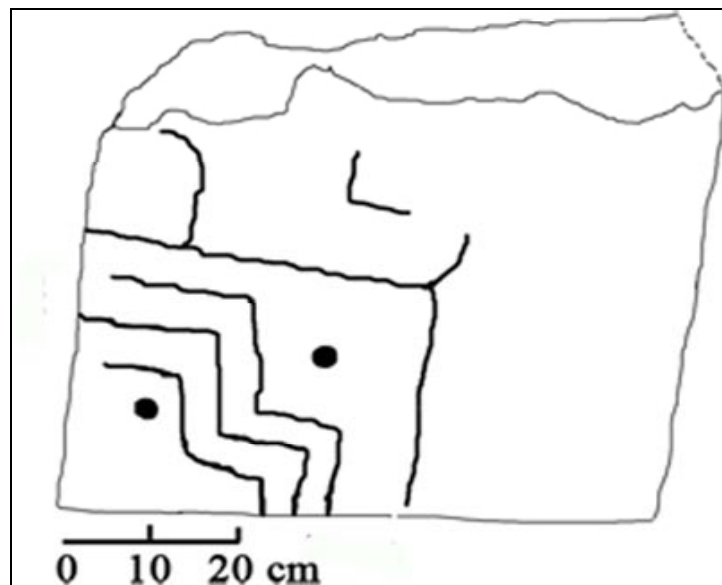


Figure 4.57 Step design on 'Throne,' drawing



Figure 4.58 Petroglyphs, Group I

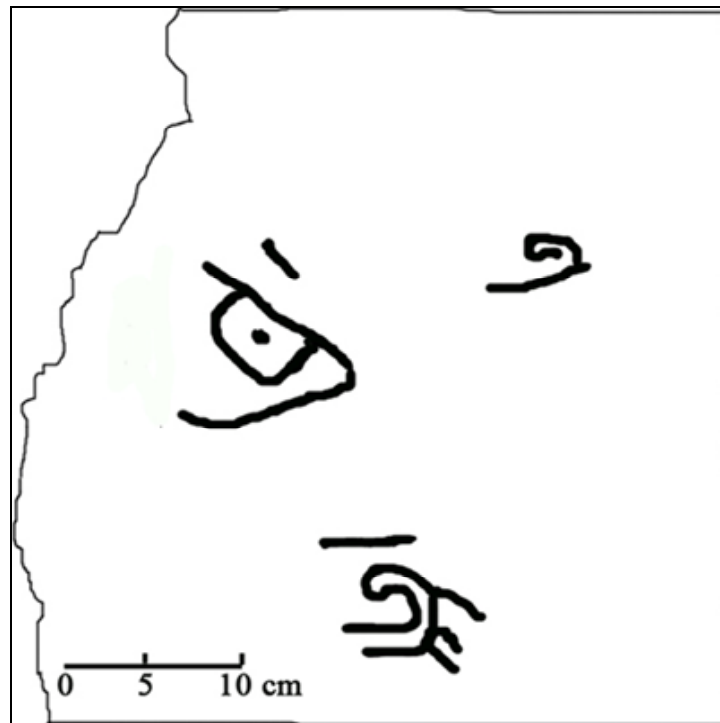


Figure 4.59 Petroglyphs, Group I, drawing



Figure 4.60 Star-shaped petroglyph, Group II

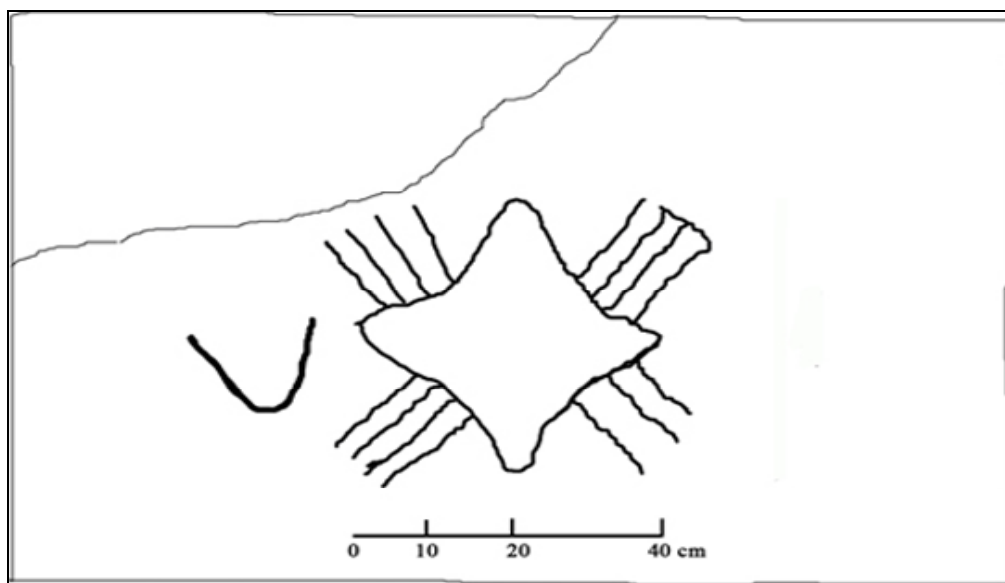


Figure 4.61 Star-shape petroglyph, Group II, drawing





Figure 4.62 Cross-shaped petroglyphs, Group III

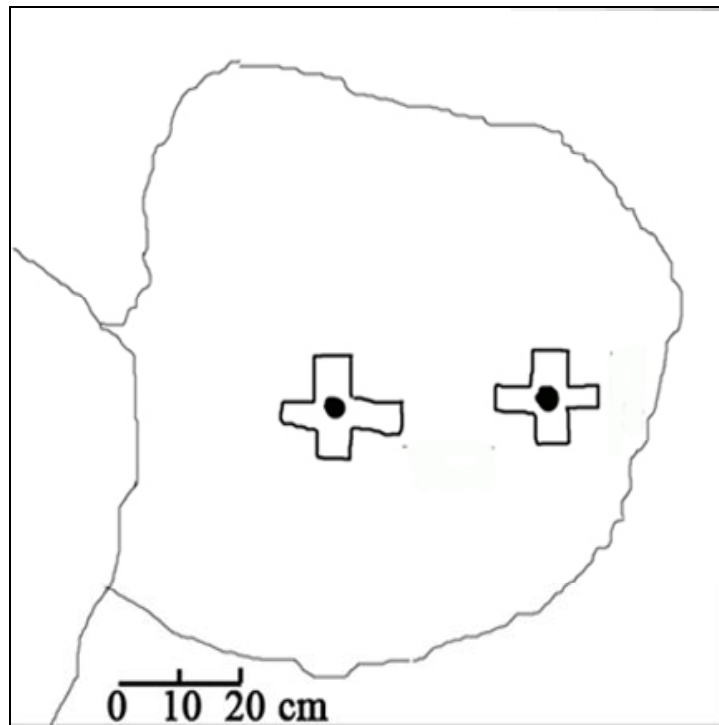


Figure 4.63 Cross-shaped petroglyphs, Group III, drawing



Figure 4.64 Petroglyph, Group IV

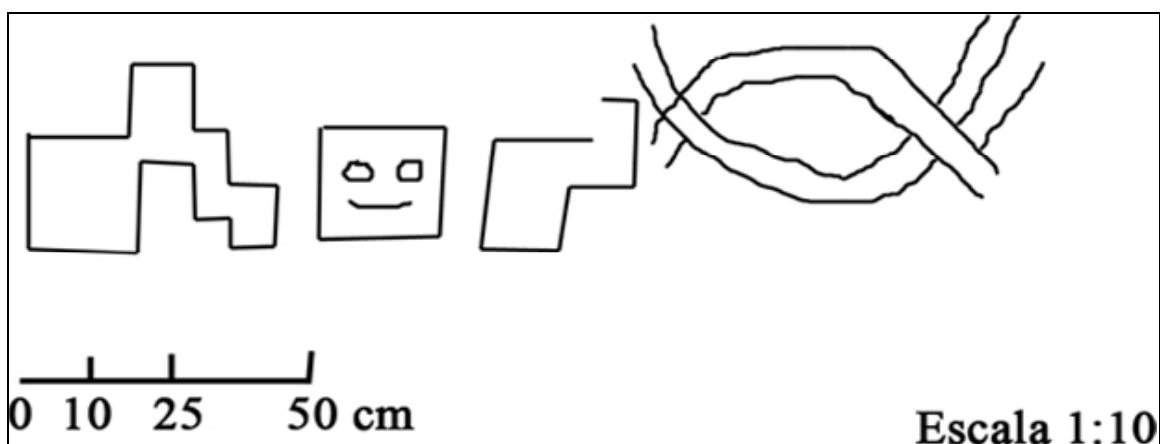


Figure 4.65 Petroglyph, Group IV, drawing





Figure 4.66 Petroglyph, Group V



Figure 4.67 Petroglyphs, Group V, drawing



Figure 4.68 Petroglyph group, Group VI

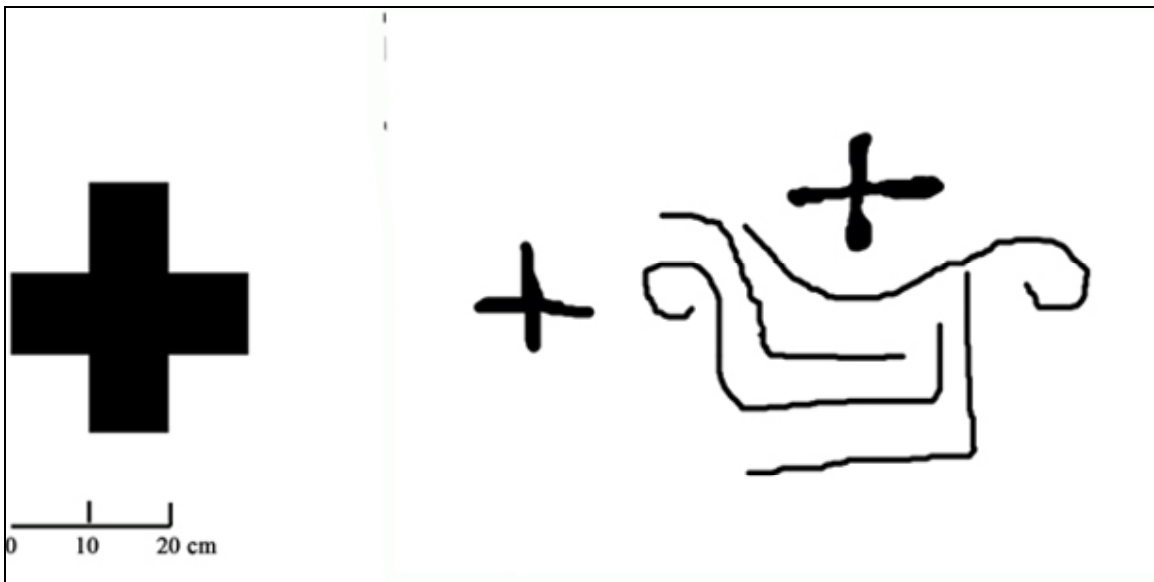


Figure 4.69 Petroglyph group, Group VI, drawing



Figure 4.70 Complex Petroglyph



Figure 4.71 Complex Petroglyph, drawing





Figure 4.72 Sacred Cave I

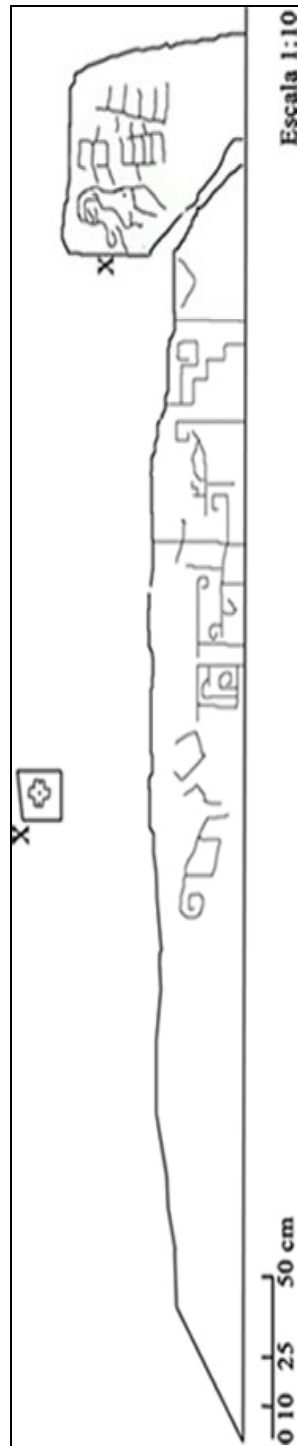


Figure 4.73 Sacred Cave I, drawing



Figure 4.74 Sacred Cave II (Sanctuary), northwest wall

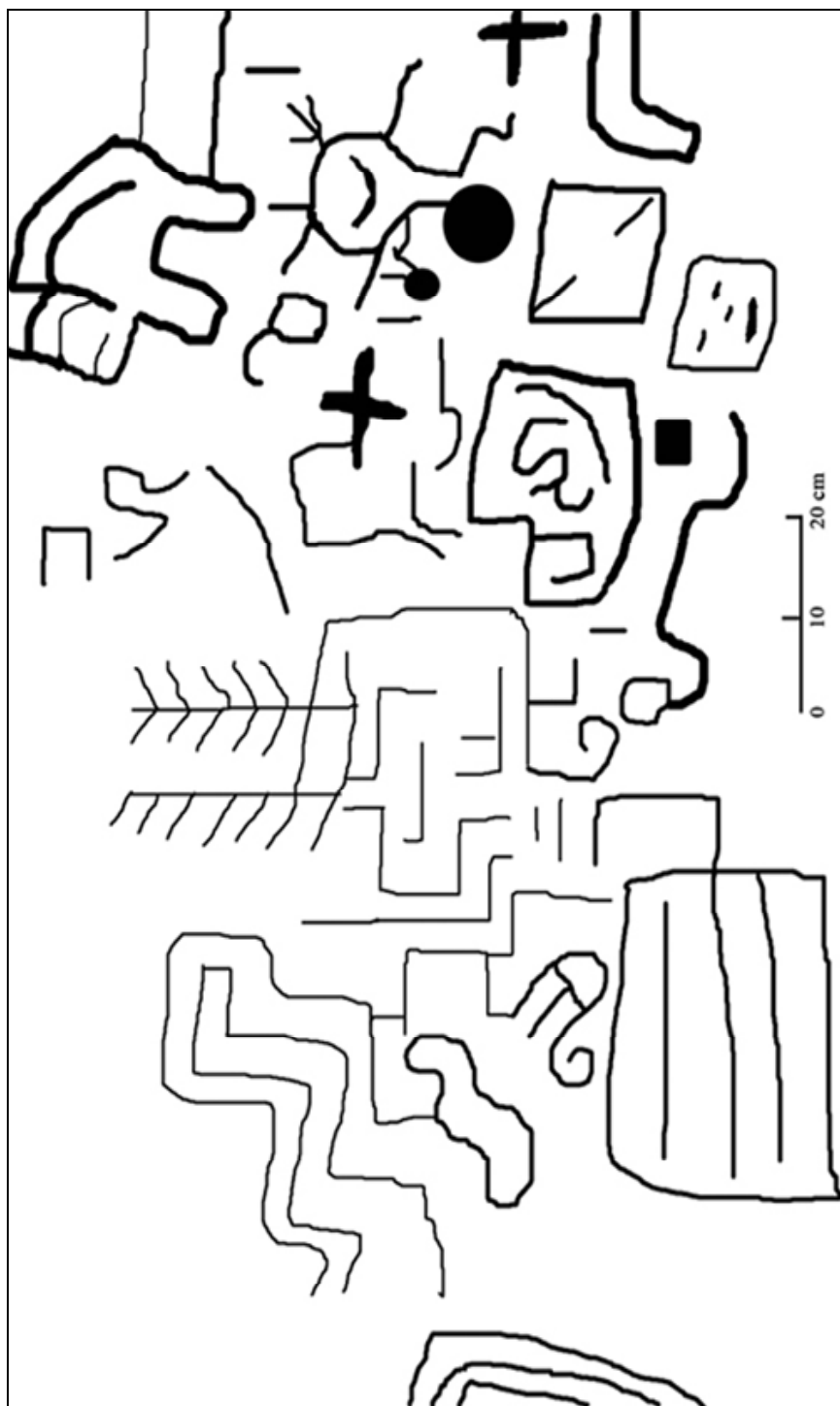


Figure 4.75 Sacred Cave II (Sanctuary), northwest wall, drawing



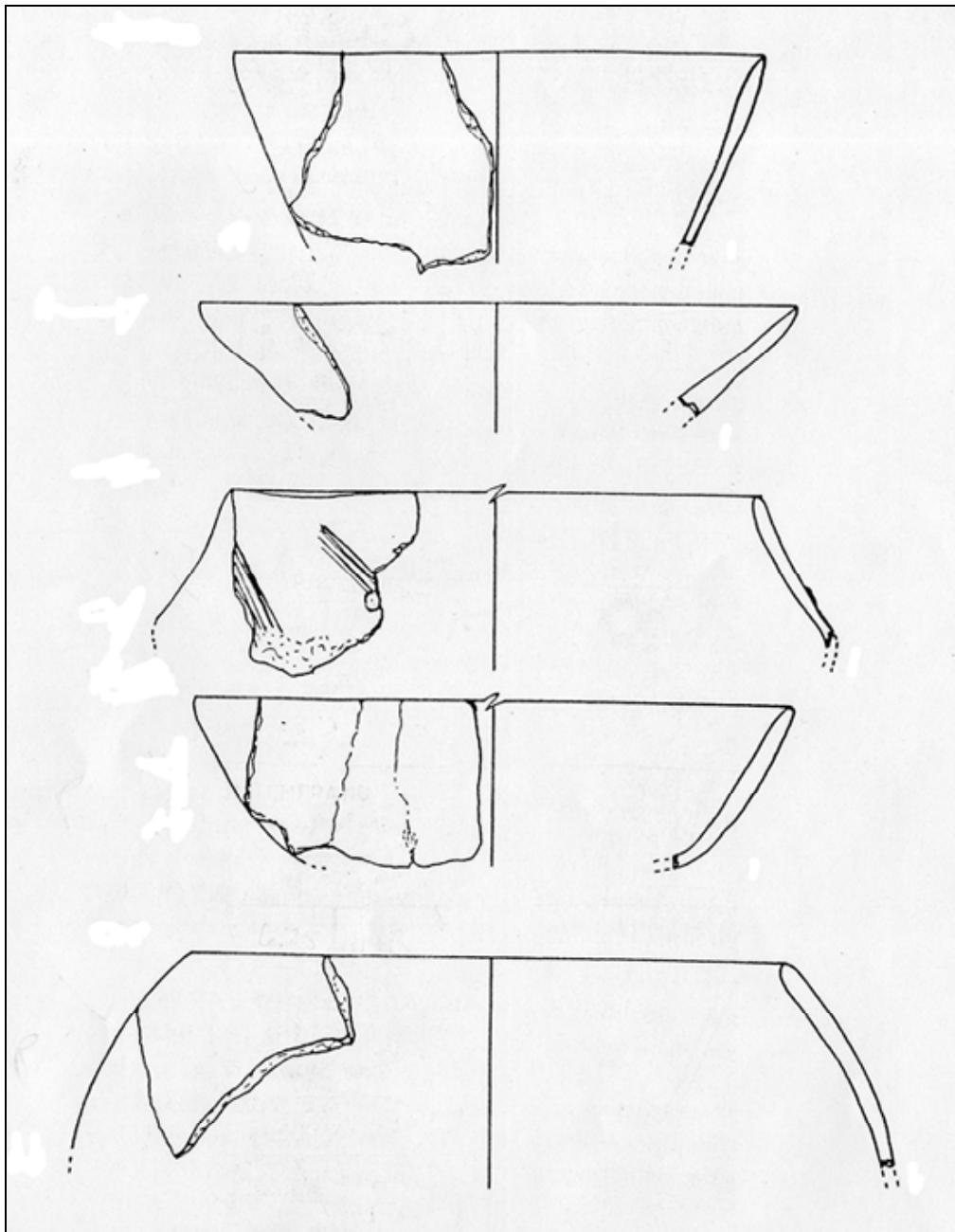


Figure 4.76 Early Huacaloma diagnostic ceramic forms (olla and bowl)

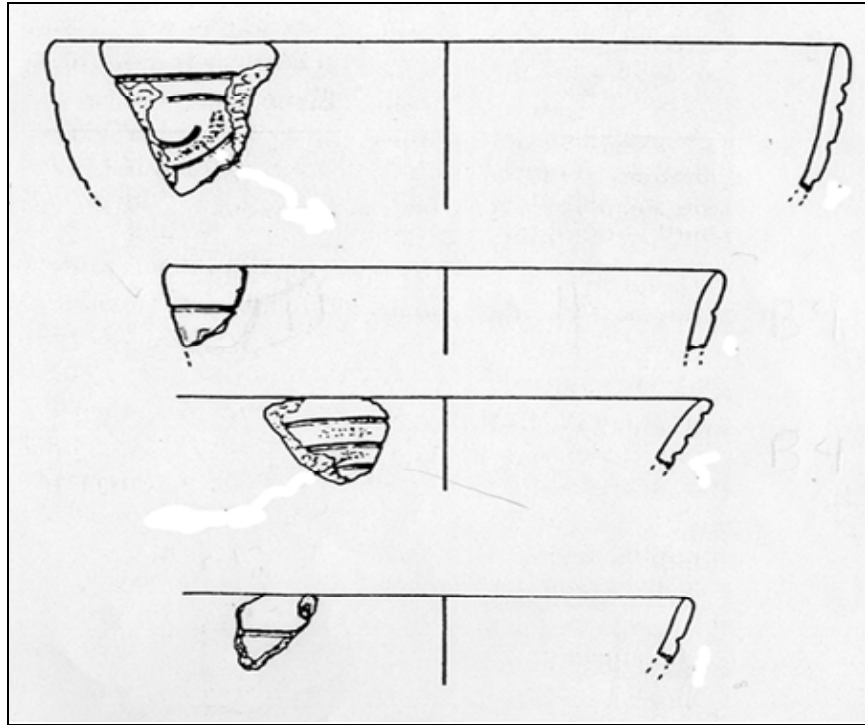


Figure 4.77 Late Huacaloma diagnostic ceramic forms

Figure 4.78 Stone circular top to subterranean canal, Kuntur Wasi,  
[see Onuki 1995: Lam 5-1]

CHAPTER 5



Figure 5.1 Feline-cactus scene, Classic Cupisnique stirrup spout bottle



Figure 5.2 Feline-cactus scene, Classic Cupisnique stirrup spout bottle



Figure 5.3 Feline-Cactus scene, Classic Cupisnique stirrup spout bottle (side 1)



Figure 5.4 Feline-cactus scene, Classic Cupisnique stirrup spout bottle (side 2)



Figure 5.5 Feline with net of incised heads, Classic Cupisnique stirrup spout bottle.



Figure 5.6 Feline capturing human, Classic Cupisnique stirrup spout bottle



Figure 5.7 Feline capturing deer, Classic Cupisnique stirrup spout bottle



Figure 5.8 Feline, Classic Cupisnique stirrup spout bottle



Figure 5.9 Mountain Sacrifice scene, Moche stirrup spout bottle



Figure 5.10 Mountain Sacrifice scene with step and volute, Moche stirrup spout bottle



Figure 5.11 Heads in net with avian/spider masks, painted clay mural, Collúd, Ventarrón Archaeological Project (Lambayeque Valley)



Figure 5.12 Spider Decapitator, drawing from carved stone bowl (Dumbarton Oaks)





Figure 5.13 Spider form, carved stone bowl (Museo Larco)



Figure 5.14 Spider Decapitator, drawing from carved stone bowl (Brooklyn Museum)

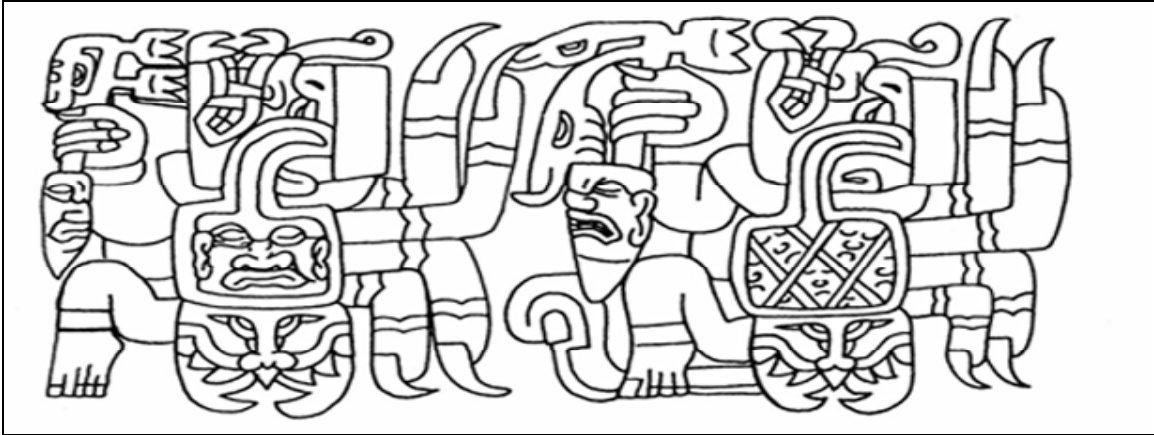


Figure 5.15 Spider Decapitators, drawing of carved stone vase, Limoncarro



Figure 5.16 Spider form, drawing from carved stone bowl, San Pablo

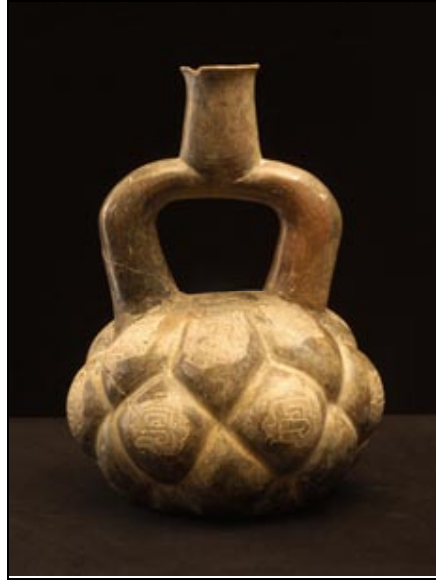


Figure 5.17 Incised heads on netted chamber, Classic Cupisnique stirrup spout bottle



Figure 5.18 *Argiope argentata*, Jequetepeque Valley



Figure 5.19 Spider Decapitator, polychrome mural, Huaca de la Luna (north face)

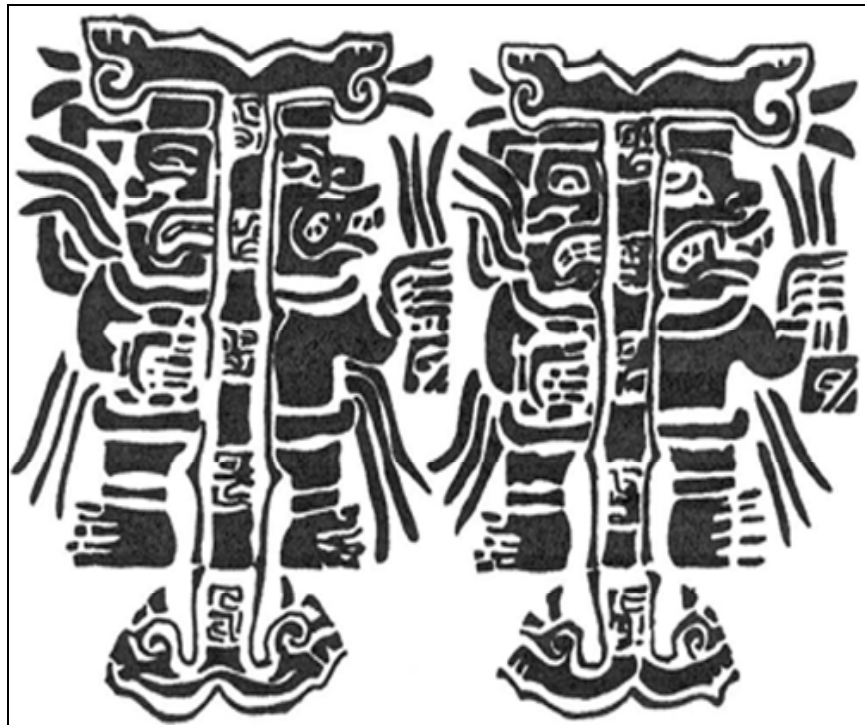


Figure 5.20 Anthropomorphic Decapitators, drawing from stone vase



Figure 5.21 Avian Decapitator, drawing from stone vessel (*Rondón Cup*)



Figure 5.22 *Spondylus princeps*, Sea of Cortéz, Mexico

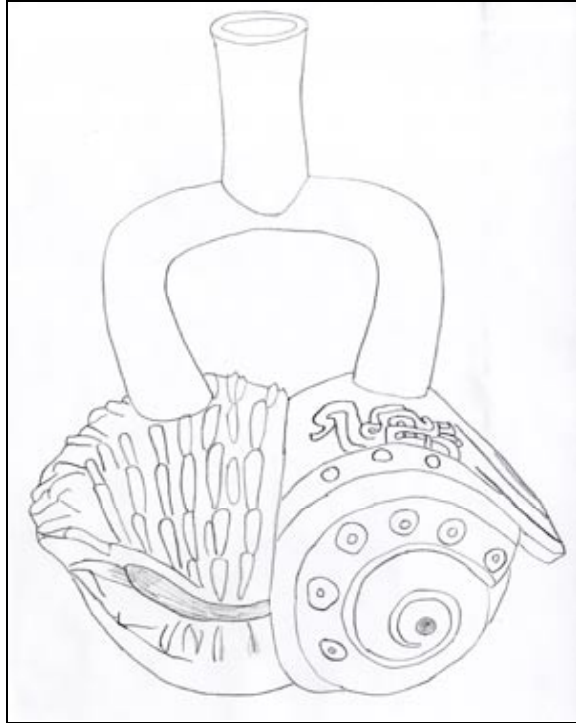


Figure 5.23 *Strombus* and *Spondylus*, Classic Cupisnique stirrup spout bottle



Figure 5.24 *Strombus* and *Spondylus*, Classic Cupisnique stirrup spout bottle



Figure 5.25 *Strombus* and *Spondylus*, Classic Cupisnique stirrup spout bottle

Figure 5.26 Isolated heads in net design, gold crown, Tomb 1, Kuntur Wasi

[see Onuki 1995: Fig I-1]





Figure 5.27 *Strombus Bearer*, rubbing of carved ashlar, Circular Plaza, Chavín de Huántar

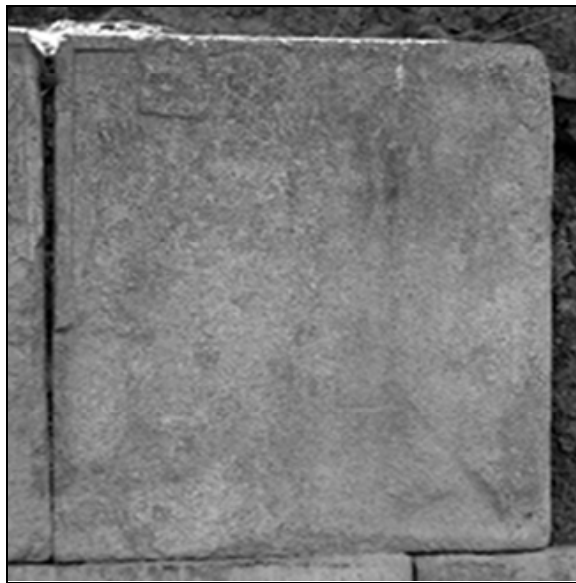


Figure 5.28 *Spondylus Bearer*, sculpted ashlar, Circular Plaza, Chavín de Huántar



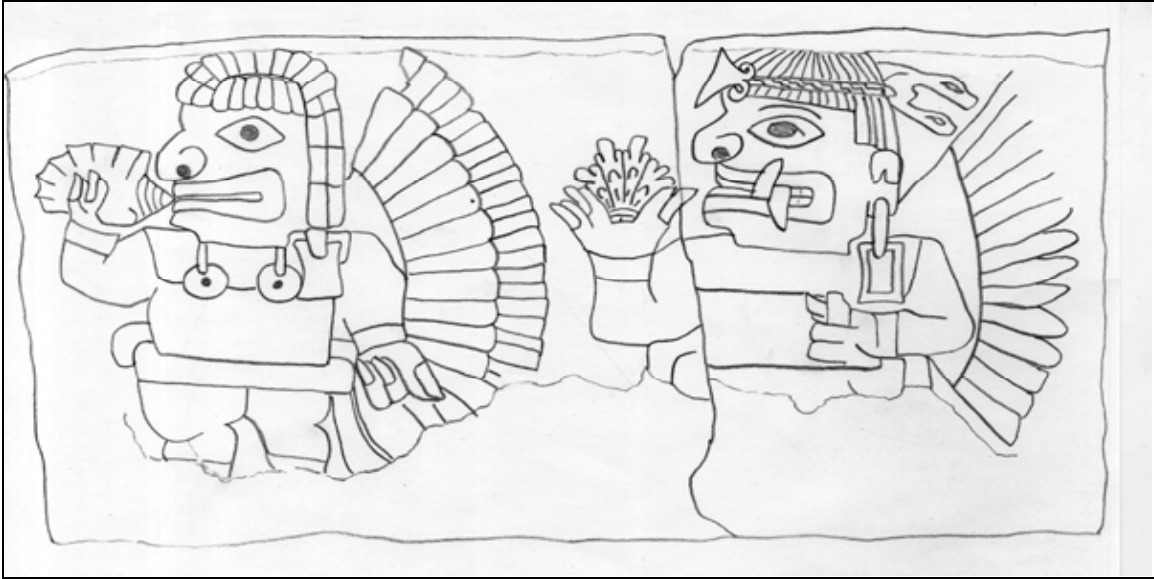


Figure 5.29 Shell Bearers, drawing of sculpted cornice (Rick 2004), Chavín de Huántar



Figure 5.30 Individual blowing shell trumpet, gold spoon with silver, Chavín de Huántar



Figure 5.31 Dual-eye motif, Classic Cupisnique stirrup spout bottle



Figure 5.32 Dual-eye motif, Classic Cupisnique stirrup spout bottle



Figure 5.33 Dual-eye motif, Classic Cupisnique stirrup spout bottle



Figure 5.34 Dual-eye motif, Chongoyape-style stirrup spout bottle

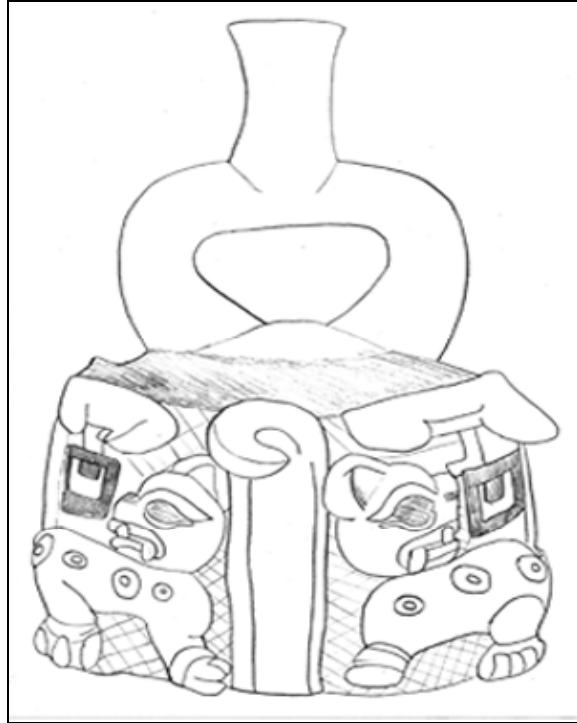


Figure 5.35 Dual-eye motif with backward-glancing feline, Classic Cupisnique stirrup spout bottle



Figure 5.36 Sculpture 46-4, Kuntur Wasi

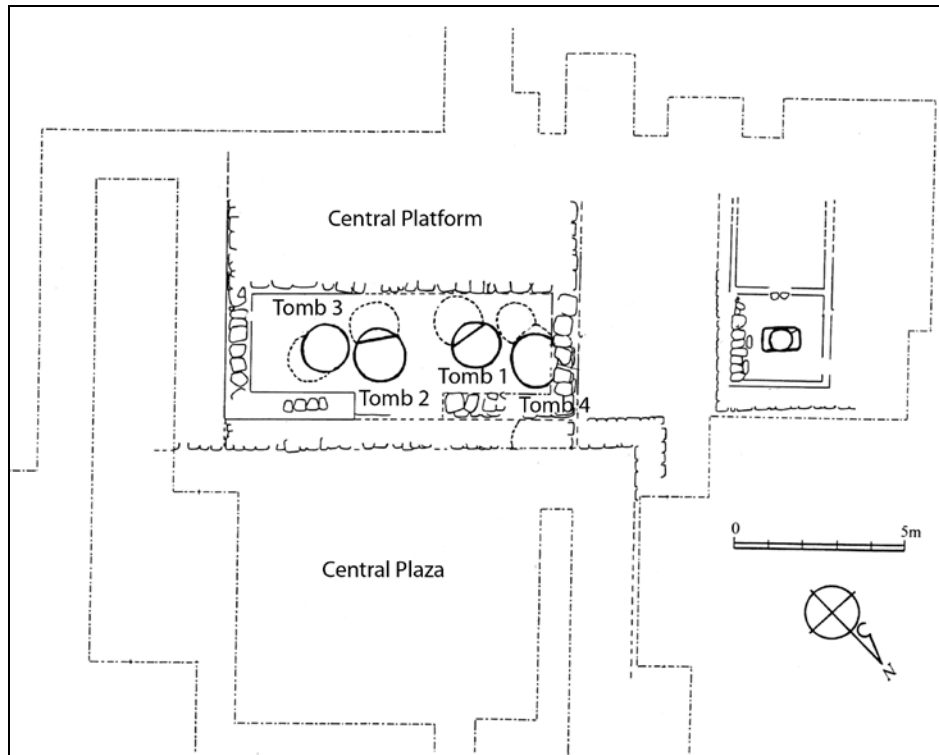


Figure 5.37 Platform I and Tombs 1-4, Kuntur Wasi

Figure 5.38 Gold adornment, Tomb 2, Kuntur Wasi

[see Onuki 1995: Lam II-2]



Figure 5.39 Anthropomorphic head, stone tenon, Chavín de Huántar



Figure 5.40 Anthropomorphic head, stone tenon, Chavín de Huántar



Figure 5.41 Zoomorphic head, stone tenon, Chavín de Huántar



Figure 5.42 Individual carrying deer, Classic Cupisnique stirrup spout bottle





Figure 5.43 Individual carrying a deer, Chongoyape-style stirrup spout bottle



Figure 5.44 Individual with hands tied behind back, Classic Cupisnique stirrup spout bottle





Figure 5.45 Individual with hands tied behind back, Classic Cupisnique stirrup spout bottle



Figure 5.46 Individual with hands tied behind back, Classic Cupisnique bottle



Figure 5.47 Detail of Figure 5.46 (hands tied behind)



Figure 5.48 Individual with mouth open, Classic Cupisnique stirrup spout bottle



Figure 5.49 Seated Individual with objects, Classic Cupisnique stirrup spout bottle



Figure 5.50 Seated Individual with objects, Classic Cupisnique stirrup spout bottle



Figure 5.51 Detail of Figure 5.50, objects in hands



Figure 5.52 Seated Individual with objects, Classic Cupisnique stirrup spout bottle



Figure 5.53 *Knife Bearer*, sculpted cornice, Chavín de Huántar



Figure 5.54 Individual with net bag, Classic Cupisnique stirrup spout bottle

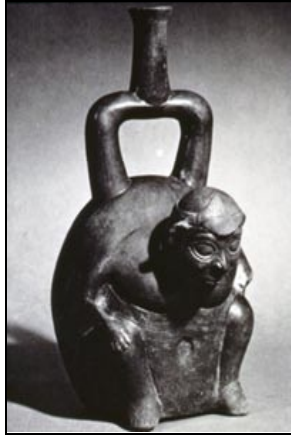


Figure 5.55 Squatting individual, Classic Cupisnique stirrup spout bottle



Figure 5.56 Contortionist Individual, Classic Cupisnique stirrup spout bottle



Figure 5.57 Contortionist Individual, Classic Cupisnique stirrup spout bottle

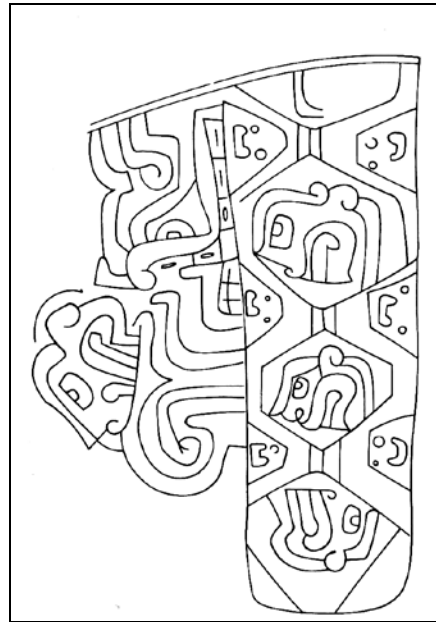


Figure 5.58 Incised design, detail of Figure 5.57



Figure 5.59 Yoga asana: *Ganda-Bherundasana* [Alexis Summers]



Figure 5.60 Yoga asana: *Viparita-shalabhasana* [Alexis Summers]





Figure 5.61 Individual with throat slit, Cupisnique stirrup spout bottle

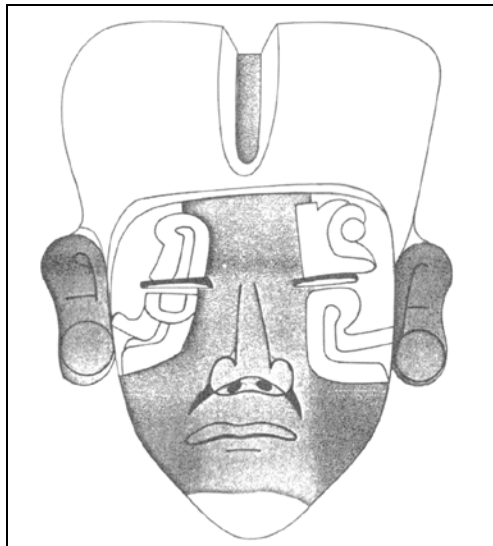


Figure 5.62 Head with incised designs, detail of Figure 5.61

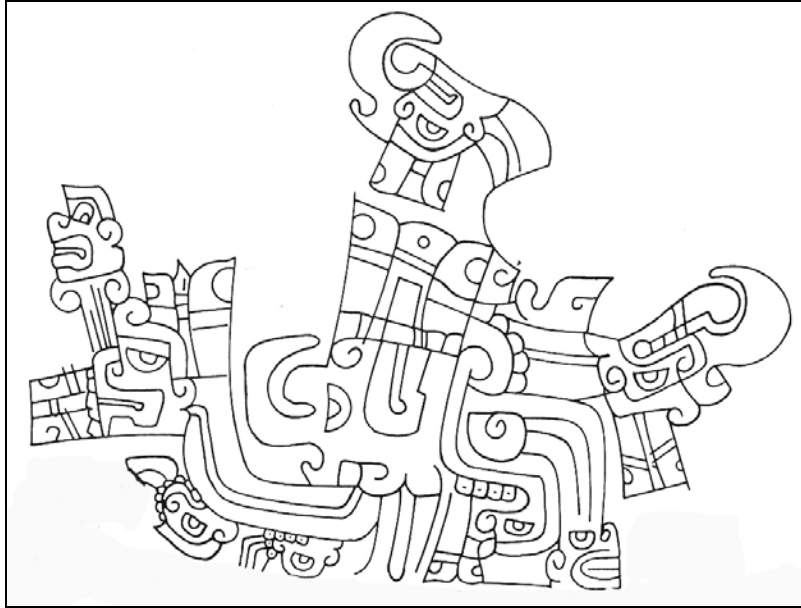


Figure 5.63 Incised designs on back, detail Figure 5.61



Figure 5.64. detail of Figure 5.61



Figure 5.65 Individual with head back, Cupisnique stirrup spout bottle



Figure 5.66 Individual porting bundle, Classic Cupisnique stirrup spout bottle



Figure 5.67 Individual porting bundle, Late Formative Period bottle

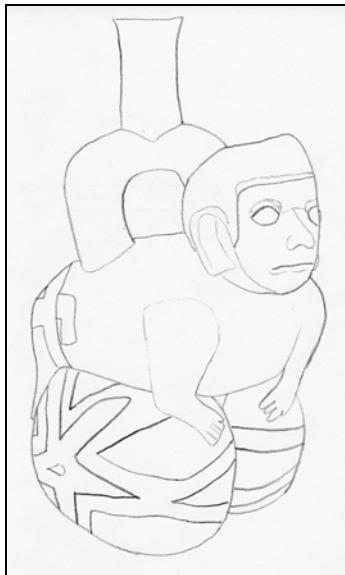


Figure 5.68 Individual floating on gourds, stirrup spout bottle



Figure 5.69 Individual seated with jar, single spout bottle



Figure 5.70 Individual seated with child, Classic Cupisnique stirrup spout bottle



Figure 5.71 Individual seated with child, Classic Cupisnique stirrup spout bottle

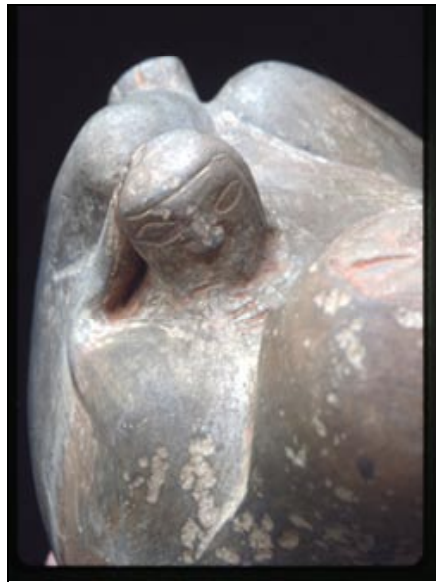


Figure 5.72 Detail of child, from Figure 5.71



Figure 5.73 Individual with child, 'Tembladera' ceramic figurine





Figure 5.74 Feline with concentric circle marks, Classic Cupisnique stirrup spout bottle



Figure 5.75 Ocelot, Moche stirrup spout bottle, Lord of Ucupe tomb, Huaca el Pueblo





Figure 5.76 Serpents with upturned tail, Cupisnique stirrup spout bottle



Figure 5.77 Monkey seated with hand at mouth, Classic Cupisnique stirrup spout bottle



Figure 5.78 Monkeys lying over vessel, Classic Cupisnique stirrup spout bottle



Figure 5.79 Monkey lying over vessel, Cupisnique stirrup spout bottle



Figure 5.80 Monkey as peanut, Classic Cupisnique stirrup spout bottle



Figure 5.81 Monkey with mouth open, jar



Figure 5.82 Human head with mouth open, single spout bottle



Figure 5.83 Monkey seated, stirrup spout bottle (fake?)



Figure 5.84 Llama (deer?) lying on side, Classic Cupisnique stirrup spout bottle



Figure 5.85 Llama (deer?) lying on stomach, Classic Cupisnique stirrup spout bottle



Figure 5.86 Two llama heads, Classic Cupisnique stirrup spout bottle



Figure 5.87 Rodent with hands at mouth, Chongoyape stirrup spout bottle, Morro de Etén



Figure 5.88 Rodent with hands at mouth, rope pattern, stirrup spout bottle



Figure 5.89 Rodent with hands at mouth, net with heads, Late style stirrup spout bottle



Figure 5.90 Armadillo on its side, stirrup spout bottle, Poro Poro



Figure 5.91 Standing figure with staff, Classic Cupisnique stirrup spout bottle





Figure 5.92 Face with large round eyes, Classic Cupisnique stirrup spout bottle



Figure 5.93 Batrachian with incised heads, late-style stirrup spout bottle



Figure 5.94 Batrachians, stirrup spout bottle



Figure 5.95 Parrot, Classic Cupisnique stirrup spout bottle



Figure 5.96 Parrots and incised head, drawing of Classic Cupisnique stirrup spout bottle

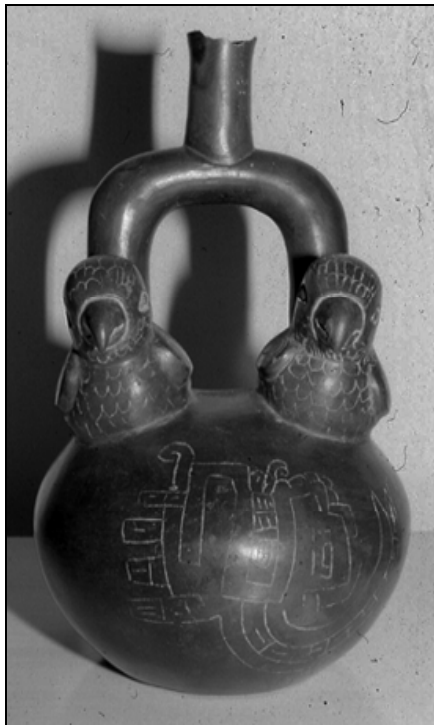


Figure 5.97 Parrots on vessel, incised design, Classic Cupisnique stirrup spout bottle



Figure 5.98 Owls, Classic Cupisnique stirrup spout bottle



Figure 5.99 Owl heads on vessel with step design, stirrup spout bottle



Figure 5.100 Four owl faces, Late Cupisnique stirrup spout bottle



Figure 5.101 Owl form, Late Cupisnique stirrup spout bottle



Figure 5.102 Raptor form, Classic Cupisnique stirrup spout bottle



Figure 5.103 Raptor form, Late Cupisnique stirrup spout bottle



Figure 5.104 Composite forms, stone mortar and pestle



Figure 5.105 Composite form (avian-spider), Late Cupisnique stirrup spout bottle



Figure 5.106 Avian modeled over pulse motif with heads, drawing of Classic Cupisnique stirrup spout bottle



Figure 5.107 Small bird with concentric circles, Classic Cupisnique stirrup spout bottle





Figure 5.108 Small bird, late style bottle (stirrup missing)



Figure 5.109 Catfish (*life*), Chongoyape style stirrup spout bottle



Figure 5.110 Freshwater Catfish (*life*) (*Tricomys punctulatus*)

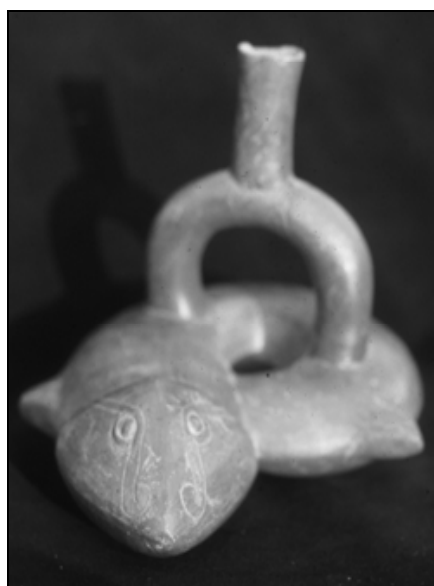


Figure 5.111 Fish, Classic Cupisnique stirrup spout bottle

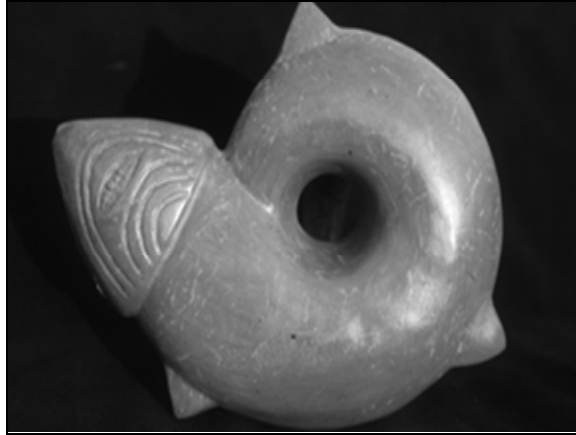


Figure 5.112 detail of Figure 5.111



Figure 5.113 Fish, Classic Cupisnique stirrup spout bottle



Figure 5.114 Shellfish with legs, Cupisnique stirrup spout bottle



Figure 5.115 Shellfish without legs, Cupisnique stirrup spout bottle



Figure 5.116 Shellfish (crab), Cupisnique stirrup spout bottle



Figure 5.117 Starfish or Octopus, Cupisnique stirrup spout bottle



Figure 5.118 San Pedro columnar cactus (*Trichocereus pachanoi*)



Figure 5.119 Cactus with concentric circle, Classic Cupisnique stirrup spout bottle



Figure 5.120 Yuca with incised heads, Classic Cupisnique stirrup spout bottle



Figure 5.121 Yuca with incised heads, Classic Cupisnique stirrup spout bottle



Figure 5.122 Squash form, Classic Cupisnique stirrup spout bottle



Figure 5.123 Four heads, avian and human, Classic Cupisnique stirrup spout bottle





Figure 5.124 Incised heads in bowl form, Classic Cupisnique stirrup spout bottle



Figure 5.125 Wrinkle face on crescent base, Classic Cupisnique stirrup spout bottle



Figure 5.126 Wrinkled-face head

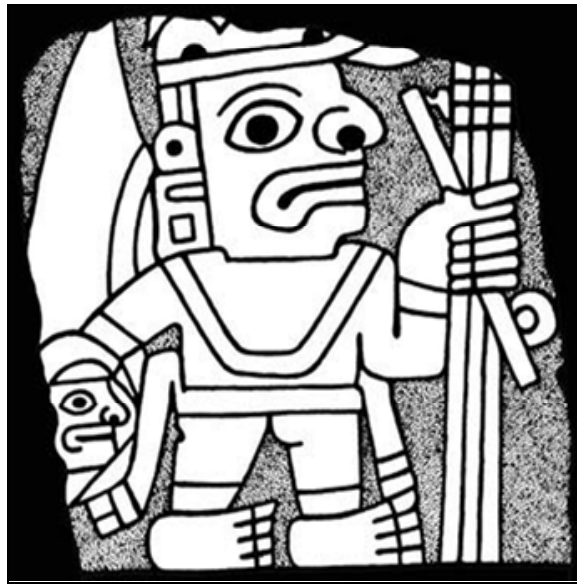


Figure 5.127 Hunter with atlatl, spears and human head, drawing of relief sculpture, Chavín de Huántar



Figure 5.128 *Head Bearer*, carved stone ashlar, Circular Plaza, Chavín de Huántar



Figure 5.129 *Head Bearer*, carved ashlar, Circular Plaza, Chavín de Huántar

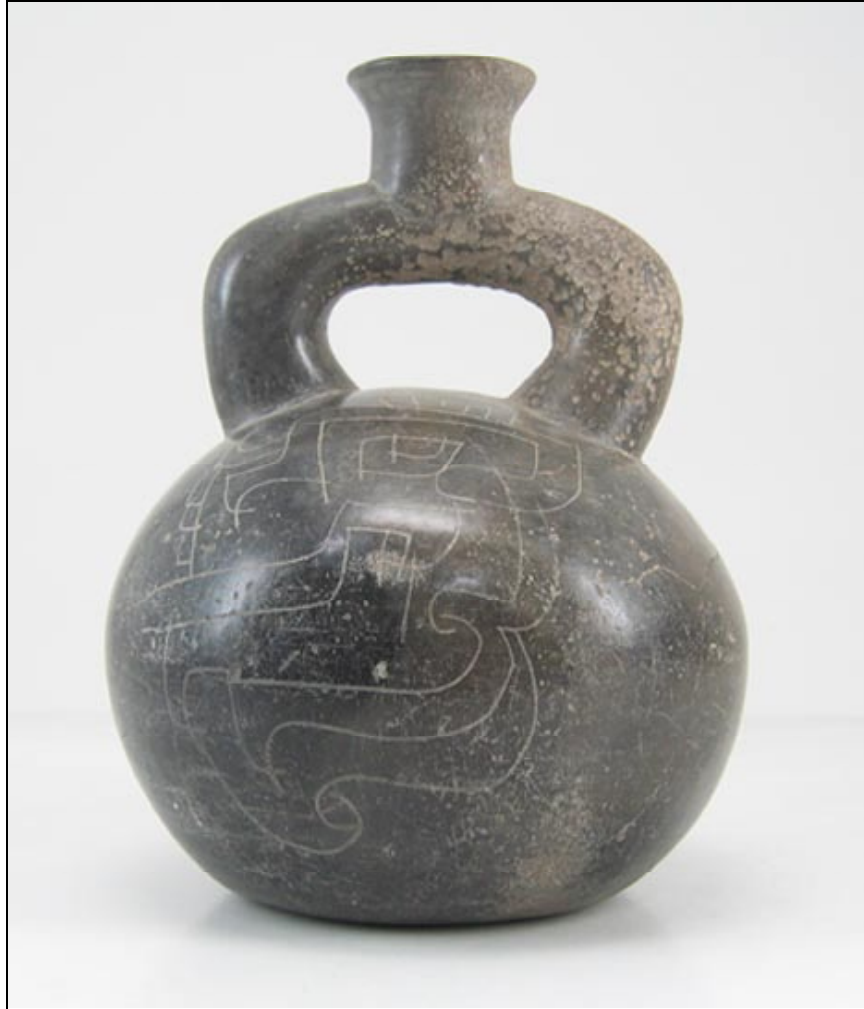


Figure 5.130 Incised head with circular loop atop, Classic Cupisnique stirrup spout bottle

## BIBLIOGRAPHY

- Alva, Walter L. 1986. Cerámica Temprana en el Valle de Jequetepeque, Norte del Perú. *Materialien zur Allgemeinen und Vergleichenden Arhcaeologie*, Vol 32, KAVA, Bonn.
- Alva, Walter L. 1988a. Investigaciones en el Complejo Formativo con Arquitectura Monumental de Purulén, Costa Norte del Perú (Informe Preliminar). *Beitrage zur Allgemeinen und Vergleichenden Archaologie* 8: 283-300. Mainz.
- Alva, Walter L. 1988b. Excavaciones en el Santuario del Templo Formativo Udimá – Poro Poro en la Sierra del Norte del Perú. *Beitrage zur Allgemeinen und Vergleichenden Archaologie* 8: 301-352. Mainz.
- Alva, Walter and Christopher B. Donnan. 1993. *Royal Tombs of Sipán*. Fowler Museum of Cultural History, University of California, Los Angeles.
- Alva Meneses, Nestor Ignacio. 2008. Spiders and Spider Decapitator in Moche Iconography: Identification from the Contexts of Sipán, Antecedents and Symbolism. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 247-262. Edited by Steve Bourget and Kimberly L. Jones. University of Texas Press, Austin.
- Arsenault, Daniel. 1994. “Symbolisme, rapports sociaux et pouvoir dans les contextes sacrificiels de la société mochica (Pérou Précolombien): Une étude archéologique et iconographique.” Unpublished PhD. Dissertation, University of Montreal.
- Ayres, Fred 1961. Rubbings from Chavín de Huántar. *American Antiquity* 27 (2): 239-244.
- Bauer, Brian S. 1998. *The Sacred Landscape of the Inca: The Cusco Ceque System*. University of Texas Press, Austin.



- Bennett, Wendell. 1943. The Position of Chavín in Andean Sequences. *Proceedings of the American Philosophical Society* (1942) 86: 323-327.
- Bennett, Wendell. 1944. *The North Highlands of Peru: Excavations in the Callejón de Huaylas and at Chavín de Huántar*. Anthropological Papers of the American Museum of Natural History, vol. 39.
- Benson, Elizabeth P., ed. 1971. *Dumbarton Oaks Conference on Chavín, October 26th and 27th, 1968*. Dumbarton Oaks Research Library and Collection, Trustees for Harvard University, Washington D.C.
- Benson, Elizabeth P. 2008. Iconography Meets Archaeology. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 1-22. University of Texas Press, Austin.
- Bird, Junius, John Hyslop and Milica Dimitrijevic Skinner. 1985. The Preceramic Excavations at the Huaca Prieta, Chicama Valley, Peru. *Anthropological Papers of the American Museum of Natural History* 62:1. New York.
- Bird, Robert McK. 1987. A Postulated Tsunami and Its Effect on Cultural Development in the Peruvian Early Horizon. *American Antiquity* 52 (2): 285-303.
- Bischof, Henning. 1988. Los relieves de barro de Cerro Sechín: evidencias de un culto marino en el antiguo Perú. *Boletín de Lima* 10 (55): 59-68.
- Bischof, Henning. 1994. Toward the Definition of Pre- and Early Chavín Art Styles in Peru. *Andean Past* 4: 169-228.
- Bischof, Henning. 1997. Cerro Blanco, valle de Nepeña, Perú – Un sitio del Horizonte Temprano en emergencia. In *Arqueológica Peruana 2: Arquitectura y Civilización en los Andes Prehispánicos*, 203-234. Edited by Elisabeth Bonnier and Henning Bischof. Mannheim: Sociedad Arqueológica Peruano-Alemana.

- Bischof, Henning. 2000. Cronología y Cultura en el Formativo Centroandino. In *Estudios Latinoamericanos*, 20. Warsaw: Sociedad Polaca de Estudios Latinoamericanos.
- Bischof, Henning. 2006. Context and Contents of Early Chavín Art. In *Chavín Art, Architecture and Culture*, 107-141. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Bonavia, Duccio and Luis Enrique Tord. 1994. *Arte e Historia del Perú Antiguo: Colección Enrico Poli Bianchi*. Banco del Sur del Perú, Arequipa.
- Bourget, Steve. 1990. Caracoles Sagrados en la Iconografía Moche. *Gaceta Arqueológica Andina* 5 (20): 45-58.
- Bourget, Steve. 1994. "Bestiare Sacré et Flore Magique: Ecologie Rituelle de l'Iconographie de la Culture Mochica, Côte Nord du Pérou." Unpublished Ph.D. Dissertation, University of Montreal, Montreal.
- Bourget, Steve. 2001. Rituals of Sacrifice: Its Practice at Huaca de la Luna and Its Representation in Moche Iconography. In *Moche Art and Archaeology in Ancient Peru*, 89-110. Edited by Joanne Pillsbury. National Gallery of Art, Washington and Yale University Press, New Haven.
- Bourget, Steve. 2006. *Sex, Death and Sacrifice in Moche Religion and Visual Culture*. University of Texas Press, Austin.
- Bourget, Steve. 2008. The Third Man: Identity and Rulership in Moche Archaeology and Visual Culture. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 263-288. Edited by Steve Bourget and Kimberly L. Jones. University of Texas Press, Austin.



- Bourget, Steve. n.d. *Human Sacrifice, Ideology and Rulership in Moche Society*. University of Texas Press, Austin.
- Bourget, Steve and Kimberly L. Jones, eds. 2008. *The Art and Archaeology of the Moche*. University of Texas Press, Austin.
- Bourget, Steve and Margaret Newman. 1998. A Toast to the Ancestors: Ritual Warfare and Sacrificial Blood in Moche Culture. *Baessler-Archiv. Neue Folge*, 46: 85-106. Berlin.
- Brennan, Curtis T. 1980. Cerro Arena: Early Cultural Complexity and Nucleation in North Coastal Peru. *Journal of Field Archaeology* 7: 1-22.
- Burger, Richard L. 1981. The radiocarbon evidence for the temporal priority of Chavín de Huántar. *American Antiquity* 46 (3): 592-602.
- Burger, Richard L. 1988. Unity and Heterogeneity within the Chavín Horizon. In *Peruvian Prehistory*, 99-144. Edited by Robert Keating. Cambridge University Press, Cambridge.
- Burger, Richard L. 1992. *Chavín and the Origins of Andean Civilization*. Thames and Hudson.
- Burger, Richard L. 1993. The Chavín Horizon: Stylistic Chimera or Socioeconomic Metamorphosis? In *Latin American Horizons*, 41-82. Edited by D. S. Rice. Dumbarton Oaks Research Library and Collections, Washington D.C.
- Burger, Richard L. 1998. *Excavaciones en Chavín de Huántar, Peru*. Pontificia Universidad Católica del Perú, Lima.
- Burger, Richard L. 2003a. Conclusions: Cultures of the Ecuadorian Formative in their Andean Context. In *Archaeology of Formative Ecuador*, 465-486. Edited by J.

- Scott Raymond and Richard L. Burger. Dumbarton Oaks Research Library and Collection, Washington, D.C.
- Burger, Richard L. 2003b. El Niño, Early Peruvian Civilizations, and Human Agency: Some Thoughts from the Lurin Valley. In *El Niño in Peru: Biology and Culture Over 10,000 Years*, 90-107. Edited by Jonathan Haas and Michael O. Dillon. Botany New Series, No. 43, Field Museum of Natural History, Chicago.
- Burger, Richard L. and Michael Glascock. 2000. Locating the Quispisisa Obsidian Source in the Department of Ayacucho, Peru. *Latin American Antiquity* 11(3): 258-268.
- Burger, Richard L. and Ramiro Matos Mendieta. 2002. Atalla: A Center on the Periphery of the Chavín Horizon. *Latin American Antiquity* 13 (2): 153-177.
- Burger, Richard L. and Lucy Salazar-Burger. 1980. Ritual and Religion at Huaricoto. *Archaeology* 33 (6): 26-32.
- Burger, Richard L. and Lucy Salazar-Burger. 1985. The Early Ceremonial Center of Huaricoto. In *Early Ceremonial Architecture in the Andes*, 111-135. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Burger, Richard L. and Lucy Salazar-Burger. 1993. The place of dual organization in early Andean ceremonialism: a comparative review. *El Mundo Ceremonial Antiguo, Senri ethnological studies*, no. 37: 97-116.
- Burger, Richard L. and Lucy Salazar-Burger. 1996. Chavín. In *Andean Art at Dumbarton Oaks* I, 45-86. Edited by Elizabeth Hill Boone. Dumbarton Oaks, Washington D.C.

- Burger, Richard L. and Lucy Salazar-Burger. 1998. A Sacred Effigy from Mina Perdida and the Unseen Ceremonies of the Peruvian Formative. *RES* 33: 28-53.
- Burger, Richard L. and Lucy Salazar-Burger. 2000. Los Primeros Templos en América. In *Los Dioses del Antiguo Perú*, 1-28. Banco de Crédito del Perú, Lima.
- Burger, Richard L. and Lucy C. Salazar. 2006. The Manchay Culture and the Coastal Inspiration for Highland Chavín Civilization. In *Chavín Art, Architecture and Culture*, 85-105. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Burger, Richard L. and Nicolas van der Merwe. 1990. Maize and the origin of highland Chavín civilization: an isotopic perspective *American anthropologist* 92: 85-95.
- Campana, Cristóbal. 1995. *El Arte Chavín: Análisis Estructural de Formas e Imágenes*. Universidad Nacional Federico Villarreal, Lima.
- Cardich, Augusto. 1991. *Descubrimiento de un Complejo Precerámico en Cajamarca, Perú*. Universidad Nacional de la Plata, Tomo XXI, 83. Buenos Aires, Argentina.
- Carrion-Cachot, Rebecca. 1948. La Cultura Chavín: Dos Nuevas Colonias Kuntur Wasi y Ancón. *Revista del Museo Nacional de Antropología y Arqueología* 2 (1): 99-172.
- Castillo, Luis Jaime and Christopher B. Donnan. 1994. La Ocupación Moche de San Jose de Moro, Jequetepeque. In *Moche Propuestas y Perspectivas*, 93-146. Edited by Santiago Uceda and Elías Mujica. Travaux de l'Institut Français d'Études Andines 79. Universidad Nacional de La Libertad, Trujillo.
- Castillo, Luis Jaime and Cecilia Pardo, ed. 2009. De Cupisnique a los Incas: El Arte del Valle de Jequetepeque. Asociación Museo Arte de Lima.
- Clarkson, P. B. and R. I. Dorn. 1995. New Chronometric Dates for the Puquios of Nasca, Peru. *Latin American Antiquity* 6: 56-69.

- Collier, Daniel. 1955. Cultural Chronology and Change as Reflected in the Ceramics of the Virú Valley, Peru. *Fieldiana: Anthropology*, V 43. Chicago Natural History Museum.
- Conklin, William. 1985. The Architecture of Huaca Los Reyes. In *Early Ceremonial Architecture in the Andes*, 139-164. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Conklin, William J. 2006. The Culture of Chavín Textiles. In *Chavín Art, Architecture and Culture*, 261-278. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Cordy-Collins, Alana. 1976. "An Iconographic Study of Chavín Textiles from the South Coast of Peru: The Discovery of a Pre-Columbian Catechism." Unpublished Ph.D. Dissertation. University of California, Los Angeles.
- Cordy-Collins, Alana. 1977. The Shamanic/Hallucinogenic Origins of Chavín Art. In *Pre-Columbian Art History: Selected Readings, Vol. I*, 353-362. Edited by Alana Cordy-Collins and Jean Stern. Peek Publications, Palo Alto, California.
- Cordy-Collins, Alana. 1978. The Dual Divinity Concept in Chavín Art. *Dorado* 3 (2): 1-31.
- Cordy-Collins, Alana. 1980. An Artistic Record of the Chavín Hallucinatory Experience. *Masterkey* 54: 84-93.
- Cordy-Collins, Alana. 1992a. Archaism or Tradition?: The decapitation theme in Cupisnique and Moche iconography. *Latin American Antiquity* 3 (3): 206-20.
- Cordy-Collins, Alana. 1996. The Cat, the Cloud, the Cactus and the Cuelebra. In *Debating Complexity*, 180-190. Edited by D.A. Meyer, P.C. Dawson and D.T.

- Hanna. Proceedings of the 26<sup>th</sup> Annual Conference of the Archaeological Association of the University of Calgary. University of Calgary.
- Cordy-Collins, Alana. 1998. The Jaguar of the Backward Glance. In *Icons of Power: Feline Symbolism in the Americas*, 155-170. Edited by N. J. Saunders. Routledge, New York.
- Cordy-Collins, Alana. 2001. Decapitation in Cupisnique and Early Moche Societies. In *Ritual Sacrifice in Ancient Peru: New Discoveries and Interpretations*, 21-33. Edited by Elizabeth P. Benson and Anita G. Cook. University of Texas Press, Austin.
- Cordy-Collins, Alana and Charles Merbs. 2008. Forensic Iconography: The Case of the Moche Giants. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 93-112. Edited by Steve Bourget and Kimberly L. Jones. University of Texas Press, Austin.
- Daggett, Richard Earl. 1987. "The Early Horizon Occupation of the Nepeña Valley, North Central Coast of Peru." Unpublished Ph.D. Dissertation, University of Massachusetts, Amherst.
- Davenport, Demarest and Katharina J. Schreiber. 1989. The Bird of Chavín: a Parrot? *Antiquity* 63: 350-356.
- DeLeonardis, Lisa. 2000. The Body Context: Interpreting Early Nasca Decapitated Burials. *Latin American Antiquity* 11 (4): 363-386.
- DeMarrais, Elizabeth, Luis Jaime Castillo, and Timothy Earle. 1996. Ideology, Materialization, and Power Strategies. *Current Anthropology* 37 (1): 15-31.
- Denevan, William M. 2001. *Cultivated Landscapes in Native Amazonia and the Andes*. Oxford University Press, London.

- Dillehay, Tom D., Herbert H. Eling Jr., and Jack Rossen. 2005. Preceramic Irrigation Canals in the Peruvian Andes. *Proceedings of the National Academy of Sciences* 102 (47): 17241-17244.
- Dillon, Michael O., Miyuki Nakazawa, and Segundo Leiva Gonzales. 2003. The Lomas Formations of Coastal Peru: Composition and Biogeographic History. In *El Niño in Peru: Biology and Culture Over 10,000 Years*, 1-9. Edited by Jonathan Haas and Michael O. Dillon. Botany New Series, No. 43, Field Museum of Natural History, Chicago.
- Donnan, Christopher B. 1973. *The Moche Occupation of the Santa Valley, Peru*. University of California Publications in Anthropology, vol. 8. Berkeley.
- Donnan, Christopher B. 1975. The Thematic Approach to Moche Iconography. *Journal of Latin American Lore* 1 (2): 147-162.
- Donnan, Christopher B. 1978. *Moche Art of Peru: Pre-Columbian Symbolic Communication*. Exhibition Catalogue, Museum of Cultural History, University of California, Los Angeles.
- Donnan, Christopher B., ed. 1985. *Early Ceremonial Architecture in the Andes*. A Conference at Dumbarton Oaks, October 8<sup>th</sup> to 10<sup>th</sup>, 1982. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Donnan, Christopher B. 1992. *Ceramics of Ancient Peru*. Fowler Museum of Cultural History, University of California, Los Angeles.
- Donnan, Christopher B. 1997. Deer Hunting and Combat: Parallel Activities in the Moche World. In *The Spirit of Ancient Peru: Treasures from the Museo Arqueológico Rafael Larco Herrera*, 51-59. Edited by K. Berrin. Fine Arts Museum of San Francisco, Thames and Hudson, New York.

- Donnan, Christopher B. 2004. *Moche Portraits from Ancient Peru*. University of Texas Press, Austin.
- Donnan, Christopher B. 2008. Moche Masking Traditions. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 67-80. Edited by Steve Bourget and Kimberly L. Jones. University of Texas Press, Austin.
- Donnan, Christopher B. and Donna McClelland. 1979. *The Burial Theme in Moche Iconography*. Studies in Pre-Columbian Art and Archaeology 21, Dumbarton Oaks Research Library and Collections, Washington D.C.
- Donnan, Christopher B. and Donna McClelland. 1999. *Moche Fineline Painting: Its Evolution and Its Artists*. University of California, Fowler Museum of Cultural History, Los Angeles.
- Druc, Isabelle C. 1998. *Ceramic production and distribution in the Chavín sphere of influence (north-central Andes)*. Oxford University Press.
- Druc, Isabelle C., Richard L. Burger, Regina Zamojska, Pierre Magny. 2001. Ancón and Garagay ceramic production at the time of Chavín de Huántar. *Journal of Archaeological Science* 28 (1): 29-43.
- Earle, Timothy. 1997. *How Chiefs Come to Power: The Political Economy in Prehistory*. Stanford University Press, California.
- Elera, Carlos G. 1983. Morro de Etén, Valle de Lambayeque. *Boletín* 8: 25-26. Museo Nacional de Antropología y Arqueología, Lima.
- Elera, Carlos G. 1986. "Investigaciones Sobre Patrones Funerarios en el Sitio Formativo del Morro de Etén, Valle de Lambayeque, Costa Norte del Perú, Tomo I y II." Memoria de Bachiller, Pontificia Universidad Católica del Perú.

- Elera, Carlos G. 1993. El Complejo Cultural Cupisnique: Antecedentes y Desarrollo de su Ideología Religiosa. In *El Mundo Ceremonial Andino, Senri Ethnological Studies, No. 37*, 229-257. Edited by Luis Millones and Yoshio Onuki. Osaka: National Museum of Ethnology.
- Elera, Carlos G. 1997. Cupisnique y Salinar: Algunos Reflexiones Preliminares. In *Arqueológica Peruana 2: Arquitectura y Civilización en los Andes Prehispánicos*, 177-202. Edited by Elisabeth Bonnier and Henning Bischof. Mannheim: Sociedad Arqueológica Peruano-Alemana.
- Elera, Carlos G. 1998. "The Puémape Site and the Cupisnique Culture: A Case Study on the Origins and Development of Complex Society in the Central Andes, Peru." Unpublished Ph.D. Dissertation, University of Calgary.
- Elera, Carlos, José Pinilla and Victor Vasquez. 1992. Bio-indicadores Zoológicos de Eventos ENSO para el Formativo Medio y Tardío de Puémape – Perú. *Pachacamac: Revista del Museo de la Nación* 1(1): 9-19.
- Eliade, Mircea. 1964. *Shamanism: Archaic Techniques of Ecstasy*. Princeton University Press.
- Eling, Jr., Herbert Henry. 1987. "The Role of Irrigation Networks in Emerging Social Complexity During Late Prehispanic Times: Jequetepeque Valley, North Coast, Peru." Unpublished Ph.D. Dissertation, the University of Texas at Austin, 1987.
- Feldman, Robert A. 1985. Preceramic Corporate Architecture: Evidence for the Development of Non-egalitarian Social Systems in Peru. In *Early Ceremonial Architecture in the Andes*, 71-92. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington, D.C.
- Fuchs, Peter R. 1997. Nuevos Datos Arqueométricos para la Historia de Ocupación de Cerro Sechín. In *Arqueológica Peruana 2: Prehispanic Architecture and*



- Civilization in the Andes*, 145-161. Edited by Elizabeth Bonnier and Henning Bischof. Sociedad Arqueológica Peruana-Alemana. Reiss Museum, Mannheim.
- Fuchs, Peter R., Renate Patzschke, Claudia Schmitz, German Yenque, and Jesus Briceño. 2006. Investigaciones Arqueológicas en el Sitio de Sechín Bajo, Casma. *Boletín de Arqueología PUCP* 10: 111-135.
- Fung Pineda, Rosa. 1976. Excavaciones en Pacopampa, Cajamarca. *Revista del Museo Nacional* 41 (1975): 129-207, Lima.
- Fung Pineda, Rosa. 1985. Excavaciones en Pacopampa, Chota. In *Arqueología: Historia de Cajamarca, I*, 153-167. Edited by Fernando Silva Santisteban, Waldemar Espinoza Soriano, and Rogger Ravines. Instituto Nacional de Cultura, Cajamarca, Perú.
- Gade, Daniel W. 1966. Achira, the Edible Canna, Its Cultivation and Use in the Peruvian Andes. *Economic Botany* 20 (4): 407-415.
- Gálvez Mora, César A., J. Juan Castañeda Murga and Rosario M. Becerra Urteaga. 1990. Consumo de Caracoles Terrestres en los Valles de Moche y Virú. *Revista del Museo de Arqueología*. 131-147.
- Gálvez Mora, César A. and María Andrea Runcio. 2009. El *Life* (*Trichomycterus* sp.) y su Importancia en la Iconografía Mochica. *Arqueobios* 3 (1): 55-87.
- Gell, Alfred. 1998. *Art and Agency: An Anthropological Theory*. Oxford University Press, London.
- Ghezzi, Ivan and Clive Ruggles. 2006. Las Trece Torres de Chankillo: Arqueoastronomía y Organización Social en el Primer Observatorio Solar de América. *Boletín de Arqueología PUCP* 10: 215-235.

- Glowacki, Mary and Michael Malpass. 2003. Water, Huacas, and Ancestor Worship: Traces of a Sacred Wari Landscape. *American Antiquity* 14 (4): 431-449.
- Goetzke, Mark A. 1985. The Iconographic Representation of Communication in Chavín Art: Contexture, Reciprocity, Focalization, and Embedding. In *Art as a Means of Communication in Preliterate Societies*, 183-195. Edited by Dan Eban, with Erik Cohen and Brenda Danet. Proceedings of the Wright International Symposium on Primitive and Precolumbian Art. The Israel Museum, Jerusalem.
- Grieder, Terence. 1975. A Dated Sequence of Building and Pottery at Las Haldas. *Ñawpa Pacha* 13: 99-112.
- Grieder, Terence and Alberto Bueno Mendoza. 1985. Ceremonial Architecture at La Galgada. In *Early Ceremonial Architecture in the Andes*, 93-110. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington, D.C.
- Grieder, Terence, Alberto Bueno Mendoza, C. Earle Smith, Jr., and Robert M. Malina. 1988. *La Galgada, Perú: A Preceramic Culture in Transition*. University of Texas Press, Austin.
- Hocquenghem, Anne Marie. 1987. *Iconografía Mochica*. Fondo Editorial de la Pontificia Universidad Católica del Perú, Lima.
- Hodder, Ian. 2003. *Reading the Past: Current Approaches to Interpretation in Archaeology*, 3<sup>rd</sup> Edition. Cambridge University Press, Cambridge.
- Horkheimer, Hans. 1944. *Vistas Arqueológicas del Noroeste del Perú*. Librería e Imprento Moreno, Trujillo.

- Ikehara, Hugo and Koichiro Shibata. 2005. Festines e Integración Social en el Periodo Formativo: Nuevas Evidencias de Cerro Blanco, Valle Bajo de Nepeña. *Boletín de Arqueología PUCP* 9: 123-159.
- Inokuchi, Kinya. 1998. La Cerámica de Kuntur Wasi y el problema Chavín. *Perspectivas regionales del período formativo en el Perú: Boletín de Arqueología PUCP*. 2: 161-180.
- Izumi, Seiichi, Pedro J. Cuculiza and Chiaki Kano. 1972. *Excavations at Shillacoto, Huanuco, Perú*. The University Museum No. 3. University of Tokyo, Tokyo.
- Izumi, Seiichi and Toshihiko Sono. 1963. *Andes 2: Excavations at Kotosh, Peru, 1960*. Kadokawa Publishing Company, Tokyo.
- Izumi, Seiichi and Kazua Terada. 1966. *Andes 3 – Excavations at Pechiche and Garbanzal Tumbes Valley, Peru*. Kadokawa Publishing Company, Tokyo.
- Izumi, Seiichi and Kazua Terada. 1972. *Andes 4 – Excavations at Kotosh, Peru, 1963 and 1966*. University of Tokyo Press, Tokyo.
- Julie, Jones. 2001. Innovation and Resplendence: Metalwork for Moche Lords. In *Moche Art and Archaeology in Ancient Peru*, 207-222. Edited by Joanne Pillsbury. National Gallery of Art, Washington and Yale University Press, New Haven.
- Julien, Daniel George. 1988. “Ancient Cuismanco: Settlement and Cultural Dynamics in the Cajamarca Region of the North Highlands of Peru, 200 B.C.-A.D. 1532.” Unpublished PhD Dissertation, University of Texas at Austin.
- Jones, Kimberly. 2008. “The Head Bearer Ashlar: Context and Comparisons for the Circular Plaza, Chavín de Huántar, Peru” Paper presented at the 49<sup>th</sup> Annual Society for American Archaeology Meeting, Vancouver B.C.

- Kano, Chiaki. 1979. *The Origin of the Chavín Culture*. Dumbarton Oaks Research Library and Collections, Washington D.C.
- Kato, Yasutake. 1993. Resultados de las Excavaciones en Kuntur Wasi, Cajamarca. In *El Mundo Ceremonial Andino, Senri Ethnological Studies, No. 37*, 203-228. Edited by Luis Millones and Yoshio Onuki. Osaka: National Museum of Ethnology.
- Kaulicke, Peter. 1975. *Pandanche: Un Caso del Formativo en los Andes de Cajamarca*. Seminario de Historia Rural Andina, Lima.
- Keatinge, Richard W. 1980. Archaeology and Development: The Tembladera Sites of the Peruvian North Coast. *Journal of Field Archaeology* 7:4:467-477.
- Keen, A. Myra. 1971. *Sea Shells of Tropical West America: Marine Mollusks from Baja California to Peru, Second Edition*. Stanford University Press, California.
- Kembel, Sylvia Rodriguez. 2001. "Architectural Sequence and Chronology at Chavín de Huántar, Peru." Unpublished Ph.D. Dissertation, Stanford University Department of Anthropological Sciences.
- Kembel, Sylvia R. and John Rick. 2004. Building Authority at Chavín de Huántar: Models of Social Development in the Initial Period and Early Horizon. In *Andean Archaeology*, 51-76. Edited by Helaine Silverman. Blackwell Publishing, Oxford.
- Kembel, Silvia Rodriguez. 2006. The Architecture at the Monumental Center of Chavín de Huántar: Sequence, Transformations, and Chronology. In *Chavín Art, Architecture and Culture*, 35-81. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Kolata, Alan L., ed. 1996. *Tiwanaku and Its Hinterland: Archaeology and Paleoecology of an Andean Civilization, Vol I*. Washington.

- Kosok, Peter. 1965. *Life, Land, and Water in Ancient Peru*. Long Island University Press, New York.
- Kroeber, Alfred L. 1925. *The Uhle Pottery Collections from Moche*. University of California Publications in American Archaeology and Ethnology 21:5:191-234. Berkeley, California.
- Kroeber, A. L. 1944. *Peruvian Archaeology*. Viking Fund Publications in Anthropology, 4. Werner-Glen Foundation for Anthropological Research, New York.
- Lanning, Edward P. 1960. "Chronological and Cultural Relationships of Early Pottery Styles in Ancient Peru". Unpublished Ph.D. Dissertation, University of California at Berkeley.
- Lanning, Edward P. 1967. *Peru before the Incas*. Prentice-Hall, Inc. Englewood Cliffs, New Jersey.
- Lapiner, Alan C. 1976. *Pre-Columbian Art of South America*. Harry N. Abrams, Inc., New York.
- Larco Hoyle, Rafael. 1941. *Los Cupisniques*. Casa Editora "La Crónica" y "Variedades." S.A. Limitada, Lima.
- Larco Hoyle, Rafael. 1945. *Los Cupisniques*. Buenos Aires: Sociedad Geográfica Americana.
- Larco Hoyle, Rafael. 1948. *Cronología Arqueológica del Norte del Perú*. Sociedad Geográfica Americana, Buenos Aires.
- Larco Hoyle, Rafael. 1966. *Perú*. Translated by James Hogarth. The World Publishing Company, New York.
- Larco Hoyle, Rafael. 2001 [1937]. *Los Mochicas*, I-II. Museo Arqueológico Rafael Larco Herrera, Perú.

- Lathrap, Donald W. 1971. The Tropical Forest and the Cultural Context of Chavín. In *Dumbarton Oaks Conference on Chavín 1968*, 73-100. Edited by Elizabeth P. Benson. Dumbarton Oaks Research Library and Collections, Washington D.C.
- Lathrap, Donald W. 1973. Gifts of the Cayman: Some Thoughts on the Subsistence Basis of Chavín. In *Variations in Anthropology*, 91-105. Edited by Donald Lathrap and Jay Douglas. Illinois Archaeological Survey, Urbana.
- Lathrap, Donald W. 1977. Our Father the Cayman, Our Mother the Gourd: Spinden Revisited, or a Unitary Model for the Emergence of Agriculture in the New World. In *Origins of Agriculture*, 713-751. Edited by Charles A. Reed. Mouton, The Hague.
- Lavalle, José Antonio and Werner Lang. 1981. *Culturas Precolombinas: Chavín Formativo*. Banco de Crédito del Perú, Lima.
- Lavellée, Danièle. 1970. *Les Représentations Animals dans la Céramique Mochica*. Institut d'Ethnologie, Paris.
- Lothrop, Samuel K. 1941. Gold Ornaments of Chavín Style from Chongoyape, Perú. *American Antiquity* 6:3:250-261.
- Lothrop, Samuel K. 1951. Gold Artifacts of Chavín. *American Antiquity* 16:3:226-240.
- Lumbreras, Luis G. 1973. Los Estudios sobre Chavín. *Revista del Museo Nacional* 38: 73-92. Lima.
- Lumbreras, Luis G. 1977. Excavaciones en el Templo Antiguo de Chavín (Sector R); Informe de la Sexta Campaña. *Ñawpa Pacha* 15: 1-38.
- Lumbreras, Luis G. 1993. *Chavín de Huántar: Excavaciones en la Galería de las Ofrendas*. Materialien zur Allgemeinen und Vergleichende Archäologie Band 51. Mainz am Rhein: Verlag Philipp von Zabern.

- Lumbreras, Luis G. 2007. *Chavín de Huántar: Excavaciones en la Galería de las Ofrendas*. Lima: Universidad Alas Peruana, Lima.
- Lumbreras, Luis, Chaco Gonzalez, and Bernard Lietaer. 1976. *Acerca de la Función del Sistema Hidráulico de Chavín*. Museo Nacional de Antropología y Arqueología, Lima.
- Lumbreras, Luis G., Richard Gebhard, W. Häusler, Frederick Kauffmann-Doig, J. Riederer, G. Sieben, U. Wagner. 2003. Mössbauer Study of Ceramic Finds from the Galería de las Ofrendas, Chavín de Huántar. *Hyperfine Interactions* 150: 51-72.
- Lyon, Patricia. 1978. Female Supernaturals in Ancient Perú. *Ñawpa Pacha* 16: 95-140.
- Maldonado, Elena, ed. 1992. *Arqueología de Cerro Sechín, Tomo I y II*. Pontificia Universidad Católica del Perú, Lima and Fundación Volkswagenwerk, Alemania.
- Matsuzawa, Tsugio. 1978. The Formative Site of Las Haldas, Peru: Architecture, Chronology, and Economy. Translated by Izumi Shimada. *American Antiquity* 43:4:652-673.
- McEwan, Colin. 1992. Axis and Ushnu in Chavín Iconography. *Journal of the Steward Anthropological Society* 20:79-97.
- Menzel, Dorothy, John Rowe, and Leonard Dawson. 1964. *The Paracas Pottery of Ica: A Study in Style and Time*. University of California Publications in American Archaeology and Ethnohistory, Vol 50. Berkeley.
- Mesía Montenegro, Christian. 2006. Julio C. Tello: Teoría y Practica en la Arqueología Andina. *Arqueología y Sociedad* 17: 49-66.

- Miller, Gordon. 1984. Deer Hunters and Llama Herders: Animal Species Selection at Chavín. In *The Prehistoric Occupation of Chavín de Huántar*, 282-287. Edited by Richard L. Burger. University of California, Berkeley.
- Miller, Gordon and Richard L. Burger. 1995. Our Father the Cayman, Our Dinner the Llama: Animal Utilization at Chavín de Huántar, Peru. *American Antiquity* 60 (3): 421-458.
- Miller, Gordon and Richard L. Burger. 1998. Ideología Religiosa y Utilización de Animales en Chavín de Huántar. In *Excavaciones en Chavín de Huántar*, Apéndice H, 262-302. Pontificia Universidad Católica del Perú, Lima.
- Moore, Jerry. 2005. *Architecture and Power in the Ancient Andes: the Archaeology of Public Buildings*. Cambridge University Press, New York.
- Morales Chocano, Daniel. 1980. *El Dios Felino en Pacopampa*. Seminario de Historia Rural Andina. Universidad San Marcos, Lima.
- Moseley, Michael E. 1975. *The Maritime Foundations of Andean Civilization*. Cummings, Menlo Park, California.
- Moseley, Michael E. 1992. *The Incas and their Ancestors*, Revised Edition. Thames and Hudson, London.
- Moseley, Michael E., Christopher B. Donnan and David K. Keefer. 2008. Convergent Catastrophe and the Demise of Dos Cabezas: Environmental Change and Regime Change in Ancient Peru. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 81-92. Edited by Steve Bourget and Kimberly L. Jones. University of Texas Press, Austin.
- Mujica B., Elías. 1984. Cerro Arena-Layzón: Relaciones costa-sierra en el norte del Perú. *Gaceta Arqueológica Andina*. 3:10:12-15.



- Murra, John Victor. 1956. *The Economic Organization of the Inca State*. Ph.D. Dissertation, University of Chicago.
- Narvaez Vargas, Alfredo. 2001. *Proyecto de Evaluación Arqueológica Yanacocha, Sectores: La Esperanza, Quilish Oeste y Quinoa Sur*. Informe Final, Instituto Nacional de Cultura, Lima.
- Netherly, Patricia and Tom Dillehay. 1986. Duality in Public Architecture in the Upper Zaña Valley, Northern Peru. In *Perspectives on Andean Prehistory and Protohistory*, 85-114. Edited by Dan Sanweiss and D.P. Kvietok. Latin American Studies Program, Cornell University, Ithaca, New York.
- Nials, Fred L., Eric E. Deeds, Michael E. Moseley, Shelia G. Pozorski, Thomas G. Pozorski, and Robert A. Feldman. 1979. El Niño: The Catastrophic Flooding of Coastal Peru. Parta 1-2: *Field Museum of Natural History Bulletin* 50:7:4-14 (I); 50:8:4-10.
- Núñez Jiménez, J. Antonio. 1986. *Petroglifos del Perú: Panorama Mundial del Arte Rupestre*, I. Editorial Científico-Técnica, UNESCO/PNUD. La Habana, 2do Edición.
- Ocampo, Estela, ed. 2003. *Trésors de la Céramique Précolombienne dans les Collections Barbier-Mueller*. Somogy Éditions d'Art. Fondation de l'Hermitage, Paris.
- Onuki, Yoshio. 1985. Breve Resumen de los Trabajos Arqueológicos en Cajamarca, 1982. En *Historia de Cajamarca I, Arqueología*, 61-66. INC: Cajamarca y Corporación de Desarrollo Cajamarca.
- Onuki, Yoshio, ed. 1995. *Kuntur Wasi and Cerro Blanco: Dos Sitios del Formativo en el Norte del Perú*. Tokyo: Hokusen-Sha.

- Onuki, Yoshio. 1998. Ocho tumbas especiales de Kuntur Wasi. La Muerte en el Antiguo Perú: Contextos y Conceptos Funerarios. *Boletín de Arqueología PUCP*. 1: 79-114.
- Paerregaard, Karsten. 1994. Why fight over water? Power, conflict and irrigation in an Andean Village. In *Irrigation at High Altitudes: The Social Organization of Water Control Systems in the Andes*, 189-201. Edited by William P. Mitchell and David Guillet. Washington DC: American Anthropological Association.
- Parsons, Mary Hrones 1970. Preceramic Subsistence on the Peruvian Coast. *American Antiquity* 35: 292-304.
- Patterson, Thomas. 1971. Chavín: an interpretation of its spread and influence. In *Dumbarton Oaks Conference on Chavín October 26<sup>th</sup> and 28<sup>th</sup>*, 1968, 29-48. Edited by Elizabeth Benson. Dumbarton Oaks, Washington D.C.
- Paulsen, Allison. 1974. The Thorny Oyster and the Voice of God: *Spondylus* and *Strombus* in Andean Prehistory. *American Antiquity* 39 (4): 597-607.
- Peterson, Georg. G. 1969. Cumbemayo: Acueducto Arqueológico que Cruza la Divisoria Continental (Departamento de Cajamarca, Perú). *Tecnía* 3: 112-139. Publicación de la Universidad Nacional de Ingeniería, Lima.
- Peterson, Georg. G. 1985. Cumbemayo: Acueducto Arqueológico que Cruza la Divisoria Continental. En *Historia de Cajamarca I, Arqueología*, 97-100. INC: Cajamarca y Corporación de Desarrollo Cajamarca.
- Peyton, Bernard. 1980. Ecology, Distribution, and Food Habits of Spectacled Bears, *Tremarctos ornatus*, in Peru. *Journal of Mammalogy* 61 (4): 639-652.
- Philander, S. George H. 1990. *El Niño, La Niña and the Southern Oscillation*. Academic Press, San Diego.

- Pillsbury, Joanne. 1996. The Thorny Oyster and the Origins of Empire: Implications of Recently Uncovered *Spondylus* Imagery from Chan Chan, Peru. *Latin American Antiquity* 7 (4): 313-340.
- Pimentel, Victor. 1986. *Petroglifos en el Valle Medio y Bajo de Jequetepeque, Norte del Perú*. C.H. Beck, München.
- Polis, Gary A., Stephen D. Hurd, C. Todd Jackson, and Francisco Sanchez Pinero. 1997. Multifactor Population Limitation: Variable Spatial and Temporal Control of Spiders on Gulf of California Islands. *Ecology* 79 (2): 490-502.
- Pozorski, Shelia G. 1979. Prehistoric Diet and Subsistence of the Moche Valley, Peru. *World Archaeology* 11 (2): 163-184.
- Pozorski, Shelia and Thomas Pozorski. 1979. An Early Subsistence Exchange System in the Moche Valley, Perú. *Journal of Field Archaeology* 6 (4): 413-432.
- Pozorski, Shelia and Thomas Pozorski. 1987. *Early Settlement and Subsistence in the Casma Valley, Peru*. University of Iowa Press, Iowa City.
- Pozorski, Shelia and Thomas Pozorski. 2006. Las Haldas: An Expanding Initial Period Polity of Coastal Perú. *Journal of Anthropological Research* 62: 27-52.
- Pozorski, Thomas. 1976a. El Complejo Caballo Muerto y los frisos de barro de la Huaca de los Reyes. *Revista del Museo Nacional* 41: 211-251.
- Pozorski, Thomas. 1976b. "Caballo Muerto: A Complex of Early Ceramic Sites in the Moche Valley, Peru." Unpublished PhD Dissertation, The University of Texas at Austin.
- Pozorski, Thomas. 1979. An Early Subsistence Exchange Program in the Moche Valley, Perú. *Journal of Field Archaeology* 6 (4): 413-423.

- Pozorski, Thomas. 1983. The Caballo Muerto Complex and Its Place in the Andean Chronological Sequence. *Annals of Carnegie Museum* 52: 1-40.
- Pozorski, Thomas and Shelia Pozorski. 2003. The Impact of the El Niño Phenomenon on Prehistoric Chimú Irrigation Systems of the Peruvian Coast. In *El Niño in Peru: Biology and Culture Over 10,000 Years*, 71-89. Edited by Jonathan Haas and Michael O. Dillon. Botany New Series, No. 43, Field Museum of Natural History, Chicago.
- Pozorski, Thomas and Shelia Pozorski. 2005. Architecture and Chronology at the Site of Sechín Alto, Casma Valley, Peru. *Journal of Field Archaeology* 30: 143-161.
- Prohens, Jaime, Juan J. Ruiz, and Fernando Nuez. 1996. The Pepino (*Solanum muricatum*, Solanaceae): A “New” Crop with a History. *Economic Botany* 50 (4): 355-368.
- Proulx, Donald A. 1968. *An Archaeological Survey of the Nepeña Valley, Peru*. PhD Dissertation, Department of Anthropology, University of Massachusetts, Amherst.
- Proulx, Donald A. 2006. *A Sourcebook of Nasca Ceramic Iconography: Reading a Culture through its Art*. University of Iowa Press, Iowa City.
- Pulgar Vidal, Javier. 1981. *Geografía del Perú: las ocho Regiones Naturales del Perú*, Edición 8. Editorial Universo, Lima.
- Quilter, Jeffrey. 1985. Architecture and Chronology at El Paraíso. *Journal of Field Archaeology* 12: 279-297.
- Quilter, Jeffrey. 1990. The Moche Revolt of the Objects. *Latin American Antiquity*. 1 (1): 42-65.

- Quilter, Jeffrey. 1996. Continuity and Disjunction in Pre-Columbian Art and Culture. *RES.* 29-30: 303-317.
- Quilter, Jeffrey. 1997. The Narrative Approach to Moche Iconography. *Latin American Antiquity.* 8 (2): 113-133.
- Quinn, William H., Victor T. Neal, and Santiago E. Antunez de Mayolo. 1987. El Niño Occurrences over the past four and a half centuries. *Journal of Geophysical Research* 92 (C13): 14449-14461.
- Ravines, Rogger. 1982. Arqueología del Valle Medio de Jequetepeque. Instituto Nacional de Lima, Perú.
- Ravines, Rogger. 1984. Sobre la Formación de Chavín: Imágenes y Símbolos. *Boletín de Lima* 35: 27-45.
- Ravines, Rogger. 1985a. Early Monumental Architecture of the Jequetepeque Valley, Peru. In *Early Ceremonial Architecture in the Andes*, 209-226. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Ravines, Rogger. 1985b. *Cajamarca Prehispánica: Inventario de Monumentos Arqueológicos, 1ª ed.* Cajamarca: Instituto Nacional de Cultura.
- Ravines, Rogger and William Isbell. 1976. Garagay: Sitio Ceremonial Temprano en el Valle de Lima. *Revista del Museo Nacional* 41:253-275.
- Reichlin, Henry and Paule Reichlin. 1949. Recherches Archaeologiques dans le Andes de Cajamarca. *Journal de la Societe des Americanistes*, 38:137-174. Paris.
- Reichlin, Henry and Paule Reichlin. 1985. Reconocimientos arqueológicos en la sierra de Cajamarca. In *Historia de Cajamarca I, Arqueología*, 29-54. Instituto Nacional de Cultura: Cajamarca y Corporación de Desarrollo Cajamarca.

- Richardson III, James B. and Daniel H. Sandweiss. 2008. Climate Change, El Niño, and the Rise of Complex Society on the Peruvian Coast during the Middle Holocene. In *El Niño, Catastrophism, and Culture Change in Ancient America*, 59-76. Edited by Daniel H. Sandweiss and Jeffrey Quilter. Dumbarton Oaks Research Library and Collection, Harvard University Press.
- Rick, John. 2005. The Evolution of Authority and Power at Chavín de Huántar, Peru. In *Foundations of Power in the Prehispanic Andes Vol 14*, 71-89. Edited by Kevin Vaughn, D. Ogburn and Christine Conlee. American Anthropological Association.
- Rick, John. 2006. Context, Construction, and Ritual in the Development of Authority at Chavín de Huántar. In *Chavín Art, Architecture and Culture*, 3-34. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Rick, John W., Silvia Rodriguez Kembel, Rosa Mendoza Rick, and John A. Kembel. 1998. La Arquitectura del Complejo Ceremonial de Chavín de Huántar: Documentación Tridimensional y sus Implicaciones. *Boletín de Arqueología PUCP* 2: 181-214.
- Roe, Peter G. 1974. A Further Exploration of the Rowe Chavín Seriation and its Implications for North Central Coast Chronology. *Studies in Pre-Columbian Art and Archaeology*, No 13. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Roe, Peter. 1982. Cupisnique Pottery: A Cache from Tembladera. In *Pre-Columbian Art and History*, 231-253. Edited by Alana Cordy-Collins. Peek Publications, California.
- Roe, Peter. 2006. How to Build a Raptor: Why the Dumbarton Oaks “Scaled Cayman” Callango Textile is Really a Jaguaroid Harpy Eagle. In *Chavín Art, Architecture*

- and Culture*, 181-216. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Rosas, Hermilio and Ruth Shady Solis. 1970. Pacopampa: Un complejo temprano del período formativo peruano. *Arqueología y Sociedad* 3: 1-16.
- Rosas, Hermilio and Ruth Shady Solis. 1974. Sobre el Período Formativo en la sierra del extremo norte del Perú. *Arqueológicas* 15: 6-35.
- Rowe, John H. 1962. *Chavín Art: An Inquiry into its Form and Meaning*. The Museum of Primitive Art, New York.
- Rowe, John H. 1977. Form and Meaning in Chavín Art. In *Pre-Columbian Art History: Selected Readings, Vol. I*, 72-103. Edited by Alana Cordy-Collins and Jean Stern. Peek Publications, Palo Alto, California.
- Rowe, John H. 1971. The Influence of Chavín Art on Later Styles. In *Dumbarton Oaks Conference on Chavín 1968*, 101-124. Edited by Elizabeth P. Benson. Dumbarton Oaks Research Library and Collections, Washington D.C.
- Ryozo, Matsumoto. 1993. Dos Modos de Proceso Socio-Cultural: El Horizonte Temprano y el Período Intermedio Temprano en el Valle de Cajamarca. In *El Mundo Ceremonial Andino, Senri Ethnological Studies, No. 37*, 167-197. Editado por Luis Millones y Yoshio Onuki. Osaka: Museo Nacional de Etnología.
- Salazar-Burger, Lucy and Richard L. Burger. 1983. La Araña en la Iconografía del Horizonte Temprano en la Costa Norte del Perú. *Beitrage zur Allgemeinen und Vergleichenden Archäologie, Band. 4*: 213-253.

- Salazar-Burger, Lucy and Richard L. Burger. 1996. Cupisnique. In *Andean Art at Dumbarton Oaks I*, 87-100. Edited by Elizabeth Hill Boone. Dumbarton Oaks, Washington D.C.
- Salazar-Burger, Lucy and Richard L. Burger. 2000. Las divinidades del universo religioso Cupisnique y Chavín. In *Los Dioses del Antiguo Perú*, 29-70. Colección Arte y Tesoro del Perú, Banco de Crédito del Perú.
- Samaniego, Vergara, and Henning Bischof. 1985. New Evidence on Cerro Sechín, Casma Valley, Peru. In *Early Ceremonial Architecture in the Andes*, 163-190. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Sandweiss, Daniel H., K. A. Maasch, and D. G. Anderson. 1999. Transitions in the Mid-Holocene. *Science* 283: 499-500.
- Sandweiss, Daniel H, K. A. Maasch, Richard L. Burger, James B. Richardson III, H.B. Rollins, and A. Clement. 2001. Variation in Holocene El Niño Frequencies: Climate Records and Cultural Consequences in Ancient Peru. *Geology* 29 (7): 603-606.
- Sawyer, Alan and Maureen E. Maitland. 1983. A Reappraisal of Chavín. In *Art of the Andes: Pre-Columbian Sculpted and Painted Ceramics of the Arthur M. Sackler Collections*, 47-67. Edited by Lois Katz. The Arthur M. Sackler Foundation, Washington D.C.
- Scheele, Harry. 1970. "The Chavín Occupation of the Central Coast of Perú." Unpublished Ph.D. Dissertation, Harvard University.
- Schjellerup, Inga. 1995. *Chavín: Spirits, Shamans and Hallucinogenics*. Galerie Askaek, Copenhagen.



- Schreiber, Katherine J. and Josue Lancho Rojas. 1995. The Puquios of Nasca. *Latin American Antiquity* 6 (3): 229-254.
- Seki, Yuji. 1993. La Transformación de los Centros Ceremoniales del Periodo Formativo en la Cuenca de Cajamarca, Perú. In *El Mundo Ceremonial Andino, Senri Ethnological Studies, No. 37*, 143-165. Editado por Luis Millones y Yoshio Onuki. Osaka: Museo Nacional de Etnología.
- Seki, Yuji. 1998. Excavaciones en el Sitio la Bomba, Valle Medio de Jequetepeque, Departamento de Cajamarca. *Boletín de Arqueología PUCP* 1: 115-136.
- Seki, Yuji. 2001. Informe Preliminar del Proyecto de Investigaciones Arqueológicas en el Valle de Cajamarca, Perú. [Temporada 2001]. Instituto Nacional de Cultura, Cajamarca.
- Seki, Yuji. 2003. Informe Preliminar del Proyecto de Investigaciones Arqueológicas en el Valle de Cajamarca, Perú. [Temporada 2003]. Instituto Nacional de Cultura, Cajamarca.
- Seki, Yuji and Minoru Yoneda. 2005. Cambios de Manejo del Poder en el Formativo: Desde el Análisis de la Dieta Alimenticia. *Perspectivas Latinoamericanas*, 2: 110-131. Centro de Estudios Latinoamericanos, Universidad Nanzan, Nagoya, Japan.
- Seki, Yuji, Walter Tosso, Jorge Villanueva and Kinya Inokuchi. 2006. Proyecto Arqueológico Pacopampa '05: Avances y Correlaciones Regionales. *Arqueología y Sociedad* 17: 149-177.
- Shady, Ruth. 2006. La Civilización Caral: Sistema Social y Manejo del Territorio y sus Recursos: Su Trascendencia en el Proceso Cultural Andino. In *Procesos y Expresiones de Poder, Identidad y Orden Tempranos en Sudamérica, Parte I*, 59-

90. Edited by Peter Kaulicke and Tom D. Dillehay. *Boletín de Arqueología PUCP* 10.
- Sharon, Douglas and Christopher B. Donnan. 1977. The Magic Cactus: Ethnoarchaeological Continuity in Peru. *Archaeology* 30:6:374-381.
- Sharon, Douglas. 2000. *Shamanism and the Sacred Cactus*. California: San Diego Museum Papers 37.
- Sherbondy, Jeanette E. 1986. Los Ceques: Código de Canales en el Cuzco Incaico. *Allpanchis* 27: 39-74.
- Sherbondy, Jeanette E. 1992. Water Ideology in Inca Ethnogenesis. In *Andean Cosmologies Through Time: Persistence and Emergence*, 46-66. Edited by Robert V.H. Dover, Katharine E. Seibold, and John H. McDowell. Indiana University Press.
- Shibata, Koichiro. 2004. Nueva Cronología Tentativa del Periodo Formativo – Aproximación a la Arquitectura Ceremonial. In *Desarrollo Arqueológico, Costa Norte del Perú*, 79-109 Edited by Luis Alvarez. SIAN.
- Shimada, Izumi, Carlos Elera, and Melody Shimada. 1982. Excavaciones Efectuadas en el Centro de Huaca Lucía-Chólope, del Horizonte Temprano, Bátan Grande, Costa Norte del Perú: 1979-1981. *Arqueológicas* 19: 109-210.
- Shimada, Melody. 1985. Continuities and Changes in Patterns of Faunal Resource Utilization: Formative through Cajamarca Periods. In *The Formative Period in the Cajamarca Basin, Peru: Excavations at Huacaloma and Layzón, 1982*, 289-310. University of Tokyo Press.
- Shimada, Melody and Izumi Shimada. 1985. Prehistoric Llama Breeding and Herding on the North Coast of Peru. *American Antiquity* 50 (1): 3-26.

- Strong, William D. and Clifford Evans, Jr. 1952. *Cultural Stratigraphy in the Virú Valley, Northern Peru: The Formative and Florescent Epochs*. Columbia University Studies in Archaeology and Ethnohistory 4. Columbia University, New York.
- Tattersall, Ian. 1985. The Human Skeletons of Huaca Prieta, with a note on the Audioexostoses of the External Auditory Meatus. In *The Preceramic Excavations at the Huaca Prieta, Chicama Valley, Peru*, 60-76. Edited by Junius Bird, John Hyslop, and M. Skinner. Anthropological Papers of the American Museum of Natural History, Vol 62: 1.
- Tellenbach, Michael. 1986. Excavations in the Jequetepeque Valley, Northern Peru: A study on Andean Settlement Archaeology. *L'Anthropologie* 91: 905-16.
- Tello, Julio C. 1923. Wiracocha. *Inca*.
- Tello, Julio C. 1937. *El Strombus en el Arte Chavín*. Editorial Antena, Lima.
- Tello, Julio C. 1943. Discovery of the Chavín Culture in Perú. *American Antiquity* 9:1:135-160.
- Tello, Julio C. 1956. *Arqueología del Valle de Casma: Culturas Chavín, Santa o Huaylas Yunga y Sub-Chimú*. Publicación Antropológica del Archivo “Julio C. Tello” de la Universidad Nacional Mayor de San Marcos, Lima.
- Tello, Julio C. 1960. *Chavín: Cultural Matriz de la Civilización Andina*. Publicación Antropológica del Archivo “Julio C. Tello” de la UNMSM, II, Lima.
- Tello, Julio C. 2004 [1937]. *Arqueología de Cajamarca: Expedición de Marañón, 1937*. Lima: COFIDE, Grupo Santandar Perú, Centro Cultural, Museo de Arqueología y Antropología UNMSM – Fondo Editorial.

- Terada, Kazuo. 1979. *Excavations at La Pampa in the North Highlands of Peru, 1975*. University of Tokyo Press.
- Terada, Kazuo. 1985. Early Ceremonial Architecture in the Cajamarca Valley. In *Early Ceremonial Architecture in the Andes*, 191-208. Edited by Christopher B. Donnan. Dumbarton Oaks Research Library and Collection, Washington D.C.
- Terada, Kazuo and Yoshio Onuki. 1982. *Excavations at Huacaloma in the Cajamarca Valley, Peru, 1979*. University of Tokyo Press, Tokyo.
- Terada, Kazuo and Yoshio Onuki. 1985. *The Formative Period in the Cajamarca Basin, Peru: Excavations at Huacaloma and Layzón, 1982*. University of Tokyo Press, Tokyo.
- Thompson, Donald. 1962. Additional Stone Carving from the North Highlands of Peru. *American Antiquity* 9:245-246.
- Thompson, L. G., E. Mosely-Thompson, J. F. Bolzan, and B. R. Koci. 1985. A 1500-year Record of Tropical Precipitation in Ice Cores from the Quelccaya Ice Cap, Peru. *Science* 226: 50-53.
- Toshihara, Kayoko. 2002. "The Cupisnique Culture in the Formative Period World of the Central Andes, Peru." Unpublished Ph.D. Dissertation, University of Illinois at Urbana-Champaign.
- Toshihara, Kayoko. 2004. Cupisnique Iconography: Ideology and Its Manifestations in an Ancient Andean Culture. *Journal of Latin American Lore* 22 (1): 39-83.
- Treacy, John M. 1994. Teaching Water: Hydraulic Management and Terracing in Coporaque, the Colca Valley, Peru. In *Irrigation at High Altitudes: The Social Organization of Water Control in the Andes*, 99-114. Edited by William P.

- Mitchell and David Guillet. American Anthropological Association, Washington DC.
- Tykot, Robert H., Nikolaas van der Merwe, and Richard L. Burger. 2006. The Importance of Maize in Initial Period and Early Horizon Peru. In *Histories of Maize: Multidisciplinary approaches to the prehistory, linguistics, biogeography, domestication and evolution of maize*, 187-197. Edited by John E. Staller, Robert H. Tykot, and Bruce F. Benz. Elsevier Academic Press, Boston.
- Uceda, Santiago. 2008. The Priests of the Bicephalus Arc: Tombs and Effigies Found in Huaca de la Luna and Their Relation to Moche Rituals. In *The Art and Archaeology of the Moche: An Ancient Andean Society of the Peruvian North Coast*, 153-178. Edited by Steve Bourget and Kimberly L. Jones. University of Texas Press, Austin.
- Ugent, Donald, Sheila Pozorski and Thomas Pozorski. 1984. New Evidence for ancient cultivation of *Canna Edulis* in Peru. *Economic Botany* 38: 417-432.
- Ugent, Donald, Sheila Pozorski and Thomas Pozorski. 1986. Archaeological Manioc (*Manihot*) from Coastal Peru. *Economic Botany* 40 (1): 78-102.
- Urton, Gary. 1996. The Body of Meaning in Chavín Art. *RES* 29-30: 237-255.
- Urton, Gary. 2006. The Body of Meaning in Chavín Art. In *Chavín Art, Architecture and Culture*, 217-236. Edited by William J. Conklin and Jeffrey Quilter. Monograph 61, Cotsen Institute of Archaeology, University of California, Los Angeles.
- Uzawa, Kazuhiro. 2009. Un Breve informe sobre algunos estudios zooarqueológicos preliminares en el sitio de Kuntur Wasi, Cajamarca, Perú. *Artículos de Investigación*. [www.dialnet.unirioja.es/servlet/fichero\\_articulo?codigo](http://www.dialnet.unirioja.es/servlet/fichero_articulo?codigo).

- Van Buren, Mary. 1996. The Archaeology of El Nino Events and Other “Natural” Disasters. *Journal of Archaeological Method and Theory* 8 (2): 129-149.
- VanValkenburgh, Nathan Parker. n.d. “The Sound of Interregionalism in the late Late Initial Period and the early Early Horizon: Twenty *Strombus galeatus* Trumpets from Chavín de Huántar, Perú.” Unpublished honors thesis, Stanford University: Department of Anthropological Sciences.
- Verano, John. 2001. War and Death in the Moche World: Osteological Evidence and Visual Discourse. In *Moche Art and Archaeology in Ancient Peru*, 111-126. Edited by Joanne Pillsbury. National Gallery of Art, Washington and Yale University Press, New Haven.
- Vigo, Edgardo Silvo and Cesar Cornelia Lecca. 1997. *Exploración Arqueológica Ruinas Cumbemayo, Informe*. Cajamarca: INC, Gerencia Sub Regional Cajamarca IV.
- Villacorta Ostolaza, Luis Felipe. 1998. *Plan de Manejo Integral del Canal Prehispánico de Cumbemayo: Consideraciones en la Elaboración de una Estrategia de Desarrollo Científica, Educativa y Turística para la Provincia de Cajamarca*. Proposal Submitted to the National Institute of Culture, Lima Perú.
- Washburn, Dorothy. 1999. Perceptual Anthropology: The Cultural Salience of Symmetry. *American Anthropologist* 101 (2): 547-562.
- West, Michael. 1979. Early Watertable Farming on the North Coast of Peru. *American Antiquity*. 44: 138-144.
- Wester, Carlos, Juan Martinez and Arturo Tandypan. 2000. *La Granja: Investigaciones Arqueológicas*. Sociedad Minera La Granja y Museo Arqueológico Nacional Brüning de Lambayeque, Chiclayo.

- Wheeler, Jane. 2000. Patrones Prehistóricos de la Utilización de los Camélidos Sudamericanos. *Boletín Arqueología PUCP* 3: 297-305.
- Wiley, Gordon. 1951. The Chavín Problem, a Review and Critique. *Southwestern Journal of Anthropology* 7: 103-144.
- Wiley, Gordon and J.M. Corbett. 1954. *Early Ancon and Early Supe Cultures. Chavín Horizon Sites of the Central Peruvian Coast*. Columbia University Studies in Archaeology and Ethnohistory 3. Columbia University, New York.
- Williams, Carlos and Jose Pineda. 1983. La Arquitectura Temprana en Cajamarca. *Gaceta Arqueológica Andina* 1 (6): 4-5.
- Yacovlef, Eugene and F. L. Herrera. 1938. *El Mundo Vegetal de los Antiguos Peruanos*. Impresiones del Museo Nacional, Lima.
- Zoubek, Thomas Andrew. 1997. "The Initial Period Occupation of Huaca El Gallo/Huaca La Gallina, Virú Valley, Peru and Its Implications for Guañape Phase Social Complexity." Unpublished Ph.D. Dissertation, Yale University.

## **VITA**

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This dissertation was typed by the author.